

SONY®

VIDEO DISK RECORDER

DSR-DR1000
DSR-DR1000P

SERVICE MANUAL

1st Edition



⚠ 警告

このマニュアルは、サービス専用です。

お客様が、このマニュアルに記載された設置や保守、点検、修理などを行うと感電や火災、人身事故につながる可能性があります。

危険をさけるため、サービストレーニングを受けた技術者のみご使用ください。

⚠ WARNING

This manual is intended for qualified service personnel only.

To reduce the risk of electric shock, fire or injury, do not perform any servicing other than that contained in the operating instructions unless you are qualified to do so. Refer all servicing to qualified service personnel.

⚠ WARNUNG

Die Anleitung ist nur für qualifiziertes Fachpersonal bestimmt.

Alle Wartungsarbeiten dürfen nur von qualifiziertem Fachpersonal ausgeführt werden. Um die Gefahr eines elektrischen Schlages, Feuergefahr und Verletzungen zu vermeiden, sind bei Wartungsarbeiten strikt die Angaben in der Anleitung zu befolgen. Andere als die angegebenen Wartungsarbeiten dürfen nur von Personen ausgeführt werden, die eine spezielle Befähigung dazu besitzen.

⚠ AVERTISSEMENT

Ce manuel est destiné uniquement aux personnes compétentes en charge de l'entretien. Afin de réduire les risques de décharge électrique, d'incendie ou de blessure n'effectuer que les réparations indiquées dans le mode d'emploi à moins d'être qualifié pour en effectuer d'autres. Pour toute réparation faire appel à une personne compétente uniquement.

CAUTION

Danger of explosion if battery is incorrectly replaced.

Replace only with the same or equivalent type recommended by the manufacturer.
Dispose of used batteries according to the manufacturer's instructions.

Vorsicht!

Explosionsgefahr bei unsachgemäßem Austausch der Batterie.

Ersatz nur durch denselben oder einen vom Hersteller empfohlenen ähnlichen Typ. Entsorgung gebrauchter Batterien nach Angaben des Herstellers.

ATTENTION

Il y a danger d'explosion s'il y a remplacement incorrect de la batterie.

Remplacer uniquement avec une batterie du même type ou d'un type équivalent recommandé par le constructeur.
Mettre au rebut les batteries usagées conformément aux instructions du fabricant.

ADVARSEL!

Lithiumbatteri-Eksplosionsfare ved fejlagtig håndtering.

Udskiftning må kun ske med batteri af samme fabrikat og type.
Levér det brugte batteri tilbage til leverandøren.

ADVARSEL

Lithiumbatteri - Eksplosjonsfare.
Ved utskifting benyttes kun batteri som anbefalt av apparatfabrikanten.
Brukt batteri returneres apparatleverandøren.

VARNING

Explosionsfara vid felaktigt batteribyte.
Använd samma batterityp eller en likvärdig typ som rekommenderas av apparattillverkaren.
Kassera använt batteri enligt gällande föreskrifter.

VAROITUS

Paristo voi räjähtää jos se on virheellisesti asennettu.
Vaihda paristo ainoastaan laitevalmistajan suosittelemaan tyyppiin.
Hävitä käytetty paristo valmistajan ohjeiden mukaisesti.

For the customers in Japan

リチウムイオン電池のリサイクルについて



このマークはリチウムイオン電池の
リサイクルマークです。

Li-ion

リチウムイオン電池は、リサイクルできます。
不要になったリチウムイオン電池は、金属部にセロハン
テープなどの絶縁テープを貼ってリサイクル協力店へ
お持ちください。

充電式電池の回収・リサイクルおよびリサイクル協力店
については社団法人電池工業会ホームページ
<http://www.bai.or.jp/> を参照して下さい。

Für Kunden in Deutschland

Entsorgungshinweis: Bitte werfen Sie nur entladene
Batterien in die Sammelboxen beim Handel oder den
Kommunen. Entladen sind Batterien in der Regel dann,
wenn das Gerät abschaltet und signalisiert "Batterie
leer" oder nach längerer Gebrauchsdauer der Batterien
"nicht mehr einwandfrei funktioniert". Um
sicherzugehen, kleben Sie die Batteriepole z.B. mit
einem Klebestreifen ab oder geben Sie die Batterien
einzeln in einen Plastikbeutel.

For the customers in the U.S.A. and Canada

RECYCLING LITHIUM-ION BATTERIES

Lithium-Ion batteries are recyclable.
You can help preserve our environment
by returning your used rechargeable
batteries to the collection and recycling
location nearest you.



For more information regarding recycling of re-
chargeable batteries, call toll free
1-800-822-8837, or visit <http://www.rbrc.org/>

Caution: Do not handle damaged or leaking Lithium-Ion
batteries.

For the customers in the Netherlands
Voor de klanten in Nederland

Hoe u de batterijen moet verwijderen, leest u in de tekst
van deze handleiding.

Gooi de batterij niet weg maar lever deze in als klein
chemisch afval (KCA).



Table of Contents

Manual Structure

Purpose of this manual	5 (E)
Related manuals	5 (E)
Contents	5 (E)
Trademark	6 (E)

1. Installation

1-1. Operational Environment	1-1 (E)
1-2. Operating Voltage	1-1 (E)
1-3. Supplied Accessories	1-1 (E)
1-4. Optional Accessories	1-1 (E)
1-5. Matching Connectors	1-2 (E)
1-5-1. Matching Connectors/Cables	1-2 (E)
1-5-2. Input/Output Signals of the Connectors	1-3 (E)
1-6. Installation Setup	1-4 (E)

2. Service Overview

2-1. Precautions when Handling the Hard Disk Drive (HDD)	2-1 (E)
2-2. Location of Main Parts	2-2 (E)
2-3. Removing/Reattaching Cabinet	2-3 (E)
2-4. Function of Switches on Circuit Board	2-4 (E)
2-5. Upgrading Software	2-5 (E)
2-6. Circuit Protection Parts (Fuse/IC Link)	2-6 (E)
2-7. Unleaded Solder	2-6 (E)
2-8. Replacing Backup Battery	2-7 (E)
2-9. Disconnecting/Connecting Flexible Card Wire	2-8 (E)

3. Error Messages

3-1. Alarm Display	3-1 (E)
3-1-1. Alarm Display when the Main Power is Turned On	3-1 (E)
3-2. Error Codes	3-3 (E)
3-2-1. Error Code Descriptions	3-3 (E)
3-2-2. Display of Previously Detected Error Codes	3-5 (E)

4. Maintenance Menu

4-1.	Menu Structure	4-1 (E)
4-2.	Operating the Maintenance Menu	4-2 (E)
4-2-1.	Location and Function of Switches	4-2 (E)
4-2-2.	Entering the Maintenance Menu	4-2 (E)
4-2-3.	Exiting the Maintenance Menu	4-2 (E)
4-3.	Contents of Maintenance Menu	4-3 (E)
4-3-1.	MENU DATA CONTROL	4-3 (E)
4-3-2.	Disk Check	4-5 (E)
4-3-3.	Service Support	4-6 (E)
4-3-4.	OTHERS	4-7 (E)

5. Replacement of Main Parts

5-1.	HDD Replacement	5-1 (E)
5-2.	KY Frame Assembly and the Components Replacement	5-2 (E)
5-2-1.	KY Frame Assembly	5-2 (E)
5-2-2.	Search Dial Assembly	5-3 (E)
5-2-3.	KY-536/HP-115 Boards	5-4 (E)
5-3.	Boards Replacement	5-4 (E)
5-3-1.	DY-19 Board	5-4 (E)
5-3-2.	DDE-18/RM-195 Boards	5-5 (E)
5-3-3.	DPR-224/DEN-20/DIF-140 Boards	5-6 (E)
5-4.	Switching Regulator Replacement	5-7 (E)

6. Electrical Alignment

6-1.	Electrical Alignment Overview	6-1 (E)
6-1-1.	Adjustment Points	6-1 (E)
6-1-2.	Measuring Equipment	6-1 (E)
6-1-3.	Locations for Adjustment Point	6-1 (E)
6-2.	Video Adjustment	6-2 (E)
6-2-1.	Y/CPST Level Adjustment	6-3 (E)
6-2-2.	CPST (SUPER) Level Adjustment	6-3 (E)
6-2-3.	SYNC Phase Adjustment	6-4 (E)
6-2-4.	SC Phase Adjustment	6-4 (E)
6-3.	SDI Free-running Frequency Adjustment	6-5 (E)
6-4.	HCK Frequency Adjustment	6-6 (E)

7. Semiconductor Pin Assignments

8. Spare Parts

8-1.	Notes on Repair Parts	8-1
8-2.	Exploded Views	8-2
8-3.	Electrical Parts List	8-8
8-4.	Frame List	8-39
8-5.	Packing Materials & Supplied Accessories	8-40

9. Circuit Description and Block Diagram

Circuit Description	9-1 (E)
Overall	9-2

10. Schematic Diagrams

DDE-18	10-1
DEN-20	10-4
DIF-140	10-8
DPR-224	10-10
DY-19	10-56
HP-115	10-61
RM-195	10-61
PTC-100	10-61
KY-536	10-62

11. Board Layouts

DDE-18	11-1
DEN-20	11-2
DIF-140	11-3
HP-115	11-3
DPR-224	11-4
DY-19	11-8
KY-536	11-9
PTC-100	11-10
RM-195	11-10

Manual Structure

Purpose of this manual

This manual is the Service Manual for the video disk recorder DSR-DR1000/DR1000P.

This manual describes the maintenance information such as service overview, maintenance menu, spare parts, block diagrams, schematic diagrams, and board layouts.

Related manuals

In addition to this Service Manual, the following manuals are provided.

- **Operation Instructions (Printed Manual)**

DSR-DR1000/DR1000P (Supplied with equipment)

Part number : 3-704-782-11 (English; for UC, CE)

3-704-782-51 (Chinese; for CN)

- **Operating Instructions (CD-ROM)**

DSR-DR1000/DR1000P (Supplied with equipment)

Part number : 3-742-675-01

- **“Semiconductor Pin Assignments” CD-ROM (Available on request)**

This “Semiconductor Pin Assignments” CD-ROM allows you to search for semiconductors used in B&P Company equipment.

Semiconductors that cannot be searched for on this CD-ROM are listed in the service manual for the corresponding unit. The service manual contains a complete list of all semiconductors and their ID Nos., and thus should be used together with the CD-ROM.

Part number: 9-968-546-XX

Contents

The following is a summary of all the sections for understanding the contents of this manual.

Section 1 Installation

Describes the connection with the external equipment that is required when installing the equipment as a system.

Section 2 Service Overview

Describes the precaution for HDD handling, the location of main parts, the software upgrading, the replacement of parts and so on.

Section 3 Error Messages

Describes the alarms and error codes to be displayed when the unit detects abnormality.

Section 4 Maintenance Menu

Describes the maintenance menu.

Section 5 Replacement of Main Parts

Describes the replacement of the parts and board.

Section 6 Electrical Alignment

Describes the electrical adjustment of each board.

Section 7 Semiconductor Pin Assignments

This section contains information on semiconductors used for unit.

It includes a complete list of the semiconductors and their ID Nos. for retrieving information on "Semiconductor Pin Assignments" CD-ROM, which is available separately.

Please refer to this section together with the "Semiconductor Pin Assignments" CD-ROM.

Information on the semiconductors not contained in the CD-ROM at the time of issue of this manual, if any, is given in this section as well.

Section 8 Spare Parts

Describes parts list, exploded views, and frame list.

Section 9 Circuit Description and Block Diagram

Describes the circuit description and the overall block diagram.

Section 10 Schematic Diagrams

Describes the schematic diagrams for the unit.

Section 11 Board Layouts

Describes the board layouts for the unit.

Trademark

Trademarks and registered trademarks used in this manual are as follows.

- Microsoft and Windows are either registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries.
- i.LINK is trademark.

Section 1

Installation

Be sure to install the DSR-DR1000/DR1000P in location satisfying the required operational environment described below to assure the DSR-DR1000/DR1000P superior performance and to maintain the excellent serviceability and accessibility.

1-1. Operational Environment

- Operating temperature : +5 °C to +40 °C
- Humidity : 80 % or less
- Storage temperature : -20 °C to +60 °C
- Locations to avoid :
 - Areas where the unit will be exposed to direct sunlight or any other strong lights.
 - Dusty areas or areas where it is subject to vibration.
 - Areas with strong electric or magnetic fields.
 - High-temperature environment.
(Good air circulation is essential to prevent internal heat build-up. Do not block the ventilation holes on the sides of the cabinet and the rear panel.)
- Horizontal condition : within $\pm 30^\circ$

1-2. Operating Voltage

- Power voltage : AC 100 V to 240 V
- Power frequency : 50/60 Hz
- Power consumption : 60 W

1-3. Supplied Accessories

- AC power cord : 1
- Operating instructions (Printed Manual) : 1
- Operating instructions (CD-ROM) : 1 (for UC and EK model only)
- Remote control unit RM-LG2 : 1

1-4. Optional Accessories

9-pin remote cable : RCC-5G/10G/30G

1-5. Matching Connectors

1-5-1. Matching Connectors/Cables

When external cables are connected to the connector on a connector panel during maintenance, the following connectors, cables (or their equivalents) must be used.

Connectors on DSR-DR1000/DR1000P	Matching connector/cable	
Panel indication	Description	Sony Part No.
ANALOG IN REF. VIDEO IN VIDEO IN	BNC, MALE	1-569-370-12
	Y/CPST R-Y/C B-Y	
TIME CODE IN		
AUDIO IN CH-1/3,2/4	XLR 3P, MALE	1-508-084-11
ANALOG OUT REF. VIDEO OUT VIDEO OUT Y/CPST R-Y/S-C B-Y/S-Y SUPER TIME CODE OUT	BNC, MALE	1-569-370-12
AUDIO OUT CH-1/3, 2/4	XLR 3P, FEMALE	1-508-083-11
MONITOR	PIN PLUG	Separately available
SDI IN	BNC, MALE	1-569-370-12
SDI OUT1, OUT2	BNC, MALE *1	1-569-370-12
DIGITAL AUDIO (AES/EBU) IN CH-1/2, 3/4 OUT CH-1/2, 3/4	BNC, MALE *1	1-569-370-12
REMOTE IN	D-SUB 9P, MALE and JUNCTION SHELL 9P or 9P Remote Control Cable (RCC-G series)	1-560-651-11 1-561-749-00
REMOTE OUT	D-SUB 9P, MALE and JUNCTION SHELL 9P or 9P Remote Control Cable (RCC-G series)	1-560-651-11 1-561-749-00
NETWORK (Ether)	Separately available	
i. LINK	IEEE1394 6P (1 m) IEEE1394 6P (3.5 m)	1-782-408-21 1-791-184-11
CONTROL	ø 3.5 4-pole Plug	1-477-401-11
PHONES *2	JM-60 Stereo Phone Plug	---

*1 : It is recommended to connect the BELDEN 8281 cable or equivalent to this connector.

*2 : This connector is located on the front panel.

1-5-2. Input/Output Signals of the Connectors

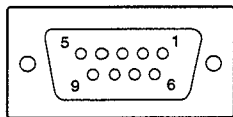
INPUT

REF. VIDEO IN :	BNC × 2 (loop-through with 75 Ω) Black burst 0.286 V (DSR-DR1000) or 0.3 V (DSR-DR1000P), 75 Ω, negative sync
VIDEO IN :	BNC × 4 (loop-through with 75 Ω) Y/CPST : 1.0 V p-p, 75 Ω, negative sync R-Y/C : 0.7 V p-p (75 % color bars for DSR-DR1000 or 100 % color bars for DSR-DR1000P), 75 Ω S-C : 0.286 V p-p (DSR-DR1000) or 0.3 V p-p (DSR-DR1000P), 75 Ω (burst level) B-Y : 0.7 V p-p (75 % color bars for DSR-DR1000 or 100 % color bars for DSR-DR1000P), 75 Ω
SDI IN :	BNC × 1 Serial Digital Interface (270 Mbps), complies with SMPTE259M & ITU-R BT.656
AUDIO IN :	XLR 3-pin × 2, male −6/−3*/0/+4 dBu (selectable), Head Room: 20/18/16/12 dB (selectable), high impedance, balanced * : For DSR-DR1000P only
DIGITAL AUDIO IN (AES/EBU) :	BNC × 2, complies with AES-3id-1995
TIME CODE IN :	BNC × 1, SMPTE time code (DSR-DR1000) or EBU time code (DSR-DR1000P), 0.5 to 18 V p-p, 3.3 kΩ, unbalanced
i.Link :	6-pin × 1, complies with IEEE1394
CONTROL :	4-pin minijack × 1 for connection of the supplied RM-LG2 Remote Control Unit
REMOTE IN :	D-sub 9-pin × 1, for connection of editing control unit, (RS-422A interface)
NETWORK (Ether) :	RJ-45 type 8-pin modular jack × 1 100BASE-TX : complies with IEEE 802.3u 10 BASE-T : complies with IEEE 802.3

OUTPUT

VIDEO OUT :	BNC × 4 Y/CPST : composite 1.0 Vp-p, 75 Ω, negative sync R-Y/S-C : R-Y : 0.7 V p-p (75 % color bars for DSR-DR1000 or 100 % color bars for DSR-DR1000P), 75 Ω S-C : 0.286 V p-p (DSR-DR1000) or 0.3 V p-p (DSR-DR1000P), 75 Ω (burst level) B-Y/S-Y : B-Y : 0.7 V p-p (75 % color bars for DSR-DR1000 or 100 % color bars for DSR-DR1000P), 75 Ω S-Y : 0.286 V p-p (DSR-DR1000) or 0.3 V p-p (DSR-DR1000P), 75 Ω (burst level) SUPER: composite 1.0 Vp-p, 75 Ω, negative sync, (character superimpose)
SDI OUT :	BNC × 2 Serial Digital Interface (270 Mbps), complies with SMPTE259M & ITU-R BT.656
AUDIO OUT :	XLR 3-pin × 2, female +4/0/−3*/−6 dBm, 600 Ω load, low impedance, balanced * : For DSR-DR1000P only
MONITOR :	Phone jack × 1, −11 ** dBu (DSR-DR1000)/−9 ** dBu (DSR-DR1000P) ±1 dB, 47 kΩ, unbalanced, −20 dBFS (DSR-DR1000)/−18 dBFS (DSR-DR1000P) ** : With the PHONES control knob at the center position
DIGITAL AUDIO OUT (AES/EBU) :	BNC × 2, complies with AES-3id-1995
TIME CODE OUT :	BNC × 1, CSMPTE time code (DSR-DR1000) or EBU time code (DSR-DR1000P), 2.2 V p-p ±3 dB, 75 Ω, unbalanced
i.LINK :	6-pin × 1, complies with IEEE1394
REMOTE OUT :	D-sub 9-pin × 1, for connection of editing control unit, (RS-422A interface)
NETWORK (Ether) :	RJ-45 type 8-pin modular jack × 1 100BASE-TX : complies with IEEE 802.3u 10 BASE-T : complies with IEEE 802.3

REMOTE IN/OUT (D-sub 9-pin : FEMALE)

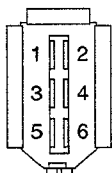


– EXT VIEW –

Pin No.	Controlling Device	Controlled Device
1	FRAME GROUND	FRAME GROUND
2	RECEIVE A	TRANSMIT A
3	TRANSMIT B	RECEIVE B
4	TRANSMIT COMMON	RECEIVE COMMON
5	PRIORITY IN	PRIORITY OUT
6	RECEIVE COMMON	TRANSMIT COMMON
7	RECEIVE B	TRANSMIT B
8	TRANSMIT A	RECEIVE A
9	FRAME GROUND	FRAME GROUND

i.LINK

Standard : Complied with IEEE1394

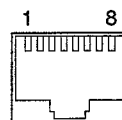


– EXT VIEW –

Pin No.	I/O	Signal Name
1	O	VP
2	—	VG
3	I/O	NTPB
4	I/O	TPB
5	I/O	NTPA
6	I/O	TPA

NETWORK (RJ-45 modular jack)

Standard : Complied with IEEE 802.3u (100BASE-TX)
and IEEE 802.3 (10BASE-T)



– EXT VIEW –

Pin No.	I/O	Signal Name
1	O	TXD (+)
2	O	TXD (-)
3	—	NC
4	—	GND
5	—	GND
6	—	CT/RX (-)
7	I	RXD (+)
8	I	RXD (-)

1-6. Installation Setup

When the unit is installed, be sure to perform the settings of switches on the front panel and menu in accordance with the operating circumference. If the setup is not completed, the unit does not operate properly.

For the setup operation, refer to the operating instructions.

System Adjustment after Installation

Pay careful attention to the following items if this unit is used in editing system.

- Input the signal which conforms with RS-170A to the REF. VIDEO IN connector.
- Adjust the sync phase of this unit to the system sync using “SYNC PHASE” control on the front panel. (Refer to Chapter 7 of the operating instructions.)
- Adjust the SCH of this unit to the system SCH using “SC PHASE” control on the front panel. (Refer to Chapter 7 of the operating instructions.)

Section 2

Service Overview

2-1. Precautions when Handling the Hard Disk Drive (HDD)

Hard Disk Drives (HDD) are installed in this unit.

A HDD is a precision part. Therefore, HDD and its data are easily damaged by the causes such as shock, vibration, static electricity, bad conditions of temperature and humidity.

When repairing this unit, read fully the following cautions, and perform the operation with extra care.

No shock and vibration

When transporting and moving;

- Pack the unit using the packaging materials specified by the manufacturer.
- Use a proper cart.
- Put a cushion* on the cart.
- Avoid rough routes, and manage the cart gently.

* : Cushion: Polyethylene foam (density: 10 kg/m³, surface intrinsic resistance: 10¹¹ to 10¹² Ω, thickness: 20 mm) or equivalent.

When placing on a floor or table;

- Put a cushion on stable and horizontal place, and put the unit on it gently.
- Do not place the unit near vibrating equipment.

For the unit and HDD;

- Do not hit the unit by tool.
- Do not drop the tool on the unit.

Take extra care;

- Do not give vibration or shock to the unit while the power is turned on, or within about 30 seconds after turning off the power.

Rack mounting

- Be careful not to give shock to the unit with HDD in the rack.
- If other HDD-equipped unit is in the rack, be sure to turn off the power of the unit.

No static electricity

- Keep static-producing items such as plastics away from the working area.
- When you touch a HDD, be sure to wear a grounded earth-band to protect against static electricity.

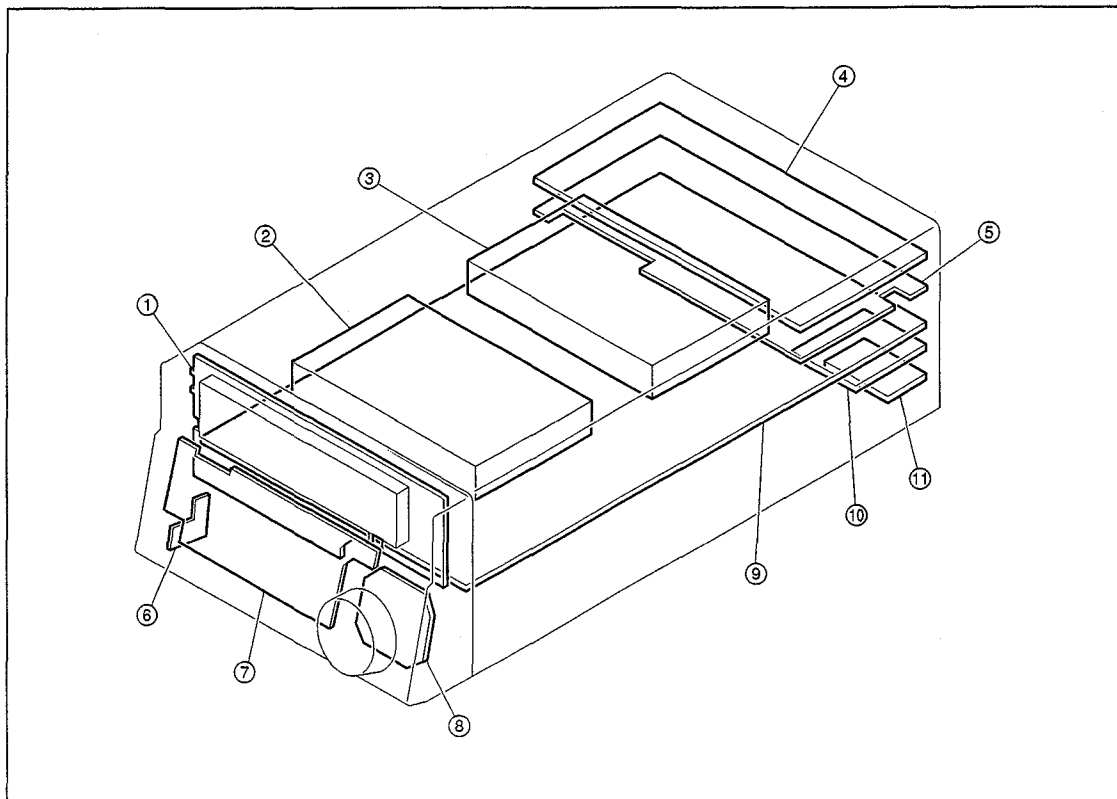
Temperature and humidity

- Temperature and humidity of storage and operating condition must be kept within the correct specified range.

When an error appears in a HDD

- Treat the HDD conform to the above cautions, even when an error appeared.
- Keep the HDD in the condition in which the error appeared, and record the details of the error.

2-2. Location of Main Parts



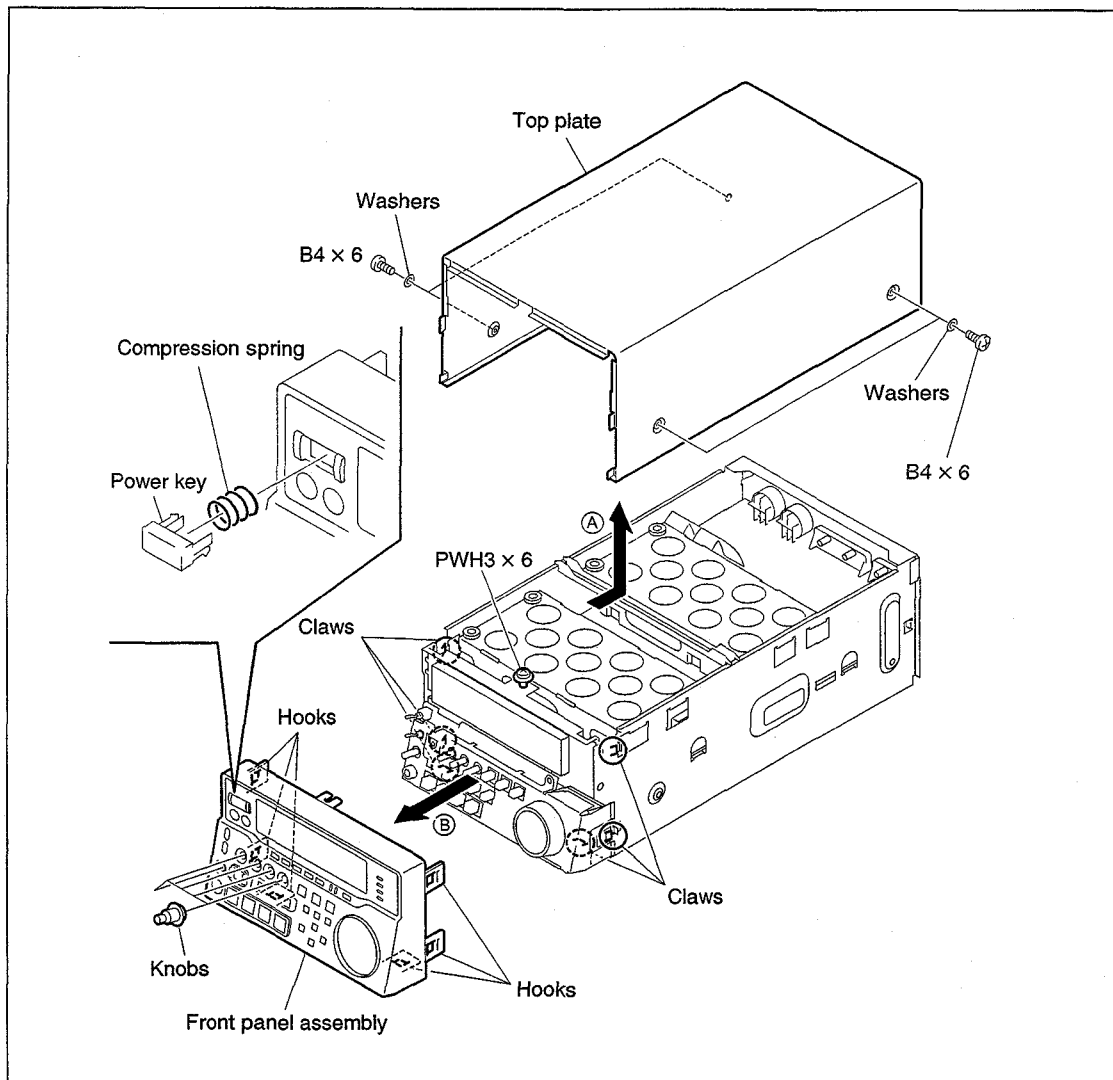
No.	Parts name	Description
①	DY-19 board	Fluorescent display/Audio meter
②	HDD (1)	Hard disk drive (1)
③	HDD (2)	Hard disk drive (2)
④	DDE-18 board	Analog video input/Analog audio input/REF. video input
⑤	DEN-20 board	Analog video output/Analog audio output/Time code input and output
⑥	HP-115 board	Headphone interface
⑦	KY-536 board	Operation panel
⑧	PTC-100 board	Search dial sensor/Input and output selection
⑨	DPR-224 board	Digital process
⑩	DIF-140 board	Ethernet interface
⑪	RM-195 board	Remote interface

2-3. Removing/Reattaching Cabinet

WARNING

Turn off the power, and unplug the power cord before removing/reattaching.

1. Remove the four screws (B4 × 6), and remove the top plate in the arrow (A) direction.
2. Remove the five knobs from the front panel assembly.
3. Loosen the screw (PWH3 × 6), release the six hooks from the claws of chassis. And then remove the front panel assembly in the arrow (B) direction.



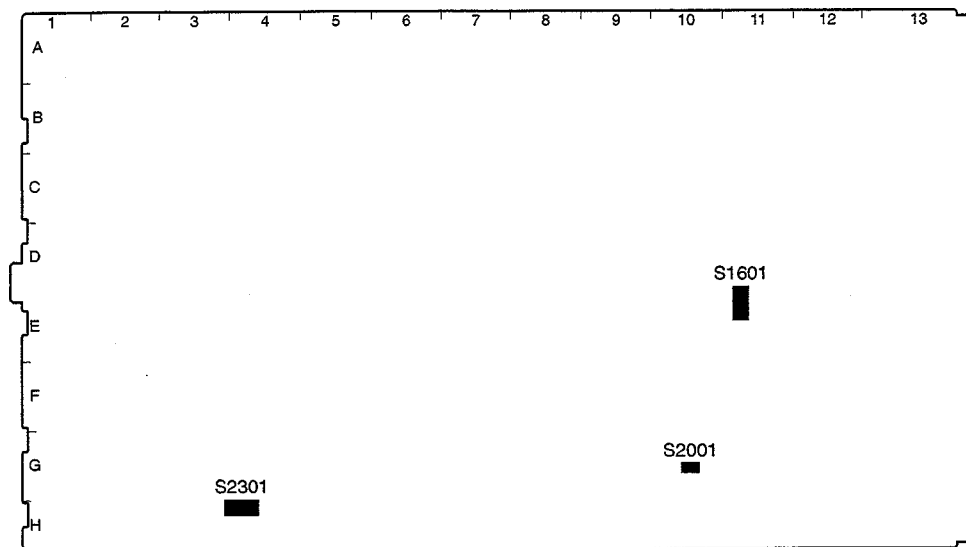
Note

Be careful not to lose the compression spring that is placed in back of the POWER switch on the front panel assembly.

4. Reattach the parts in the reverse order of steps 1 to 3.

2-4. Function of Switches on Circuit Board

DPR-224 Board



Note

Do not change the setting of the factory use switches.

Ref. No.	Bit	Name	Description	Factory setting
S1601	1	NTSC/PAL	OFF : NTSC ON : PAL	OFF
	2	UC/J	OFF : UC, CE, CN (Except Japan) ON : J	OFF
	3	—	Factory use	OFF
	4	—	Reserved	OFF
	5 to 8	—	Factory use	OFF
S2001		Reset	Reset switch	—
S2301	1 to 6	—	Factory use	OFF
	7	—	Adjust mode OFF : Normal mode ON : Adjustment mode	OFF
	8	—	Factory use	OFF

Notes

- When shipping this board as a repair part, the bits of the switch S1601 are set to all OFF.
- Before replacing with this board, set the bits 1 and 2 of S1601 according to the unit.

2-5. Upgrading Software

The DSR-DR1000/DR1000P mounts a CPU on the DPR-224 board. The software of this unit can be upgraded by connecting this unit and a personal computer (PC) to the network.

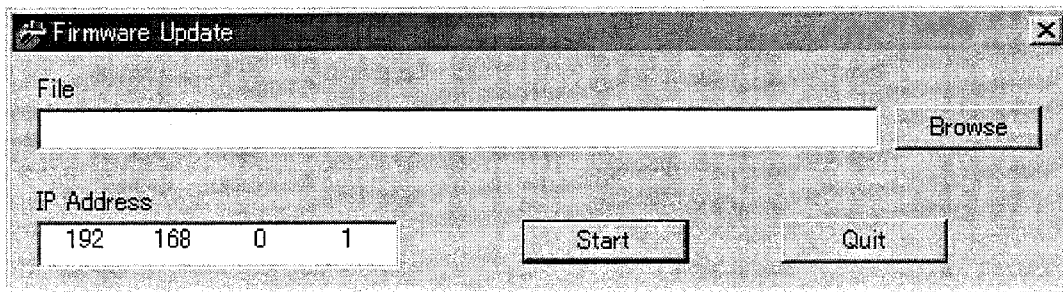
Upgrade the software by the following procedures.

Preparations

1. Install the upgrading application software “nup.exe” to a PC in advance.
(Be sure to use the PC which was installed the Windows 98, Windows 2000 or Windows XP.)
2. Download the software to upgrade to the PC.
3. Connect the unit and PC to network.

Operating procedures of “nup.exe”

1. Starts the “nup.exe”.



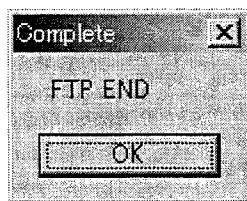
2. Enter the IP Address of the target DSR-DR1000/DR1000P in the “IP Address”.
3. Enter the transferring HEX file name in the “File”.

Notes

- By clicking the “Browse” button, the file name selection dialog appears.
- To transfer two or more files at a time, select them in the Internet Explorer window and drag and drop them onto the “nup.exe”, or select them in the file name selection dialog.

4. Click “Start” button.

When the file transfer is finished, the message “FTP END” appears.



5. When all files are transferred, restart the unit (power off and on again).
6. When the upgrading is completed properly, check the version using the maintenance menu. (Refer to “Section 4 Maintenance Menu” for the check procedure.)

2-6. Circuit Protection Parts (Fuse/IC Link)

The circuit protection parts such as fuse and IC link are mounted on the DDE-18, DEN-20, DPR-224 and DY-19 boards.

WARNING

- The fuse and IC link are important parts for ensuring safety.
Replacement with parts other than those designated will result in fire hazards and electric hazards. Therefore be sure to use only designated parts.
- If the replacement work for fuse or IC link is attempted with the power ON, this may result in electric shock.
When replacing the fuse or IC link, not only turns off the power of the unit but disconnects the power cord connected to the POWER connector.

Board	Ref. No.	Description	Part No.
DDE-18	PS1	IC LINK 2 A/72 V	△1-533-282-21
	PS2		
	PS3		
	PS4		
	PS5		
DEN-20	PS400	IC LINK 2 A/72 V	△1-533-282-21
	PS401		
	PS402		
	PS403		
DY-19	F1	FUSE (SMD) 0.8 A/125 V	△1-576-327-21
	PS1	IC LINK 0.8 A/72 V	△1-576-123-21
	PS2		
	PS3		
DPR-224	PS101	IC LINK 2.5 A/72 V	△1-576-398-21
	PS102		
	PS103		
	PS104		
	PS105		
	PS106		

2-7. Unleaded Solder

Boards requiring use of unleaded solder are printed with a lead free mark (LF) indicating the solder contains no lead. (Caution: Some printed circuit boards may not come printed with the lead free mark due to their particular size.)

 : LEAD FREE MARK

Notes

- Be sure to use the unleaded solder for the printed circuit board printed with the lead free mark.
- The unleaded solder melts at a temperature about 40 ° higher than the ordinary solder, therefore, it is recommended to use the soldering iron having a temperature regulator.
- The ordinary soldering iron can be used but the iron tip has to be applied to the solder joint for a slightly longer time. The printed pattern (copper foil) may peel away if the heated tip is applied for too long, so be careful.

2-8. Replacing Backup Battery

The DPR-224 board has the built-in lithium battery as the countermeasure for power failure. The lithium battery is attached on top of the memory (IC2313). Life of the lithium battery is about six years. Time to exchange the battery is displayed in the time counter display block and on the monitor display. Replace the battery when the following message appears just after turning on the power. When replacing, be sure to use the following specified part.

PLEASE EXCHANGE THE
BATTERY TO A NEW ONE.
PLEASE CONTACT SERVICE.

Time counter display block

Exchg Batt!

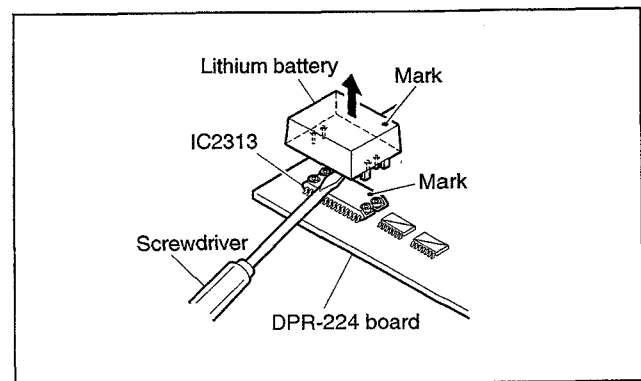
Description : M4T32-BR12SH1 (lithium battery)
Sony part number : 1-795-685-11
Life : About six years
Mounted portion : On top of IC2313/DPR-224 board (A side, H-1)

Replacing

Note

When replacing the battery, insert the replacement battery with the “+” and “-” ends correctly oriented. If the battery’s positive (+) and negative (-) terminals are backward, physical injury or damage to peripheral equipment can be result due to explosion and or leakage of internal materials.

1. Remove the HDD (1). (Refer to Section 5-1.)
2. Insert tip of a flatblade screwdriver between the lithium battery and IC2313, and remove the battery.



3. Attach the replacement lithium battery while matching the mark of the lithium battery with the mark of IC2313, and push the battery until it locks.
4. Reattach the HDD (1). (Refer to Section 5-1.)
5. After replacement, reset the calendar/clock. (For the setting procedure, refer to the operating instructions.)

2-9. Disconnecting/Connecting Flexible Card Wire

This unit uses the flexible card wire.

Note

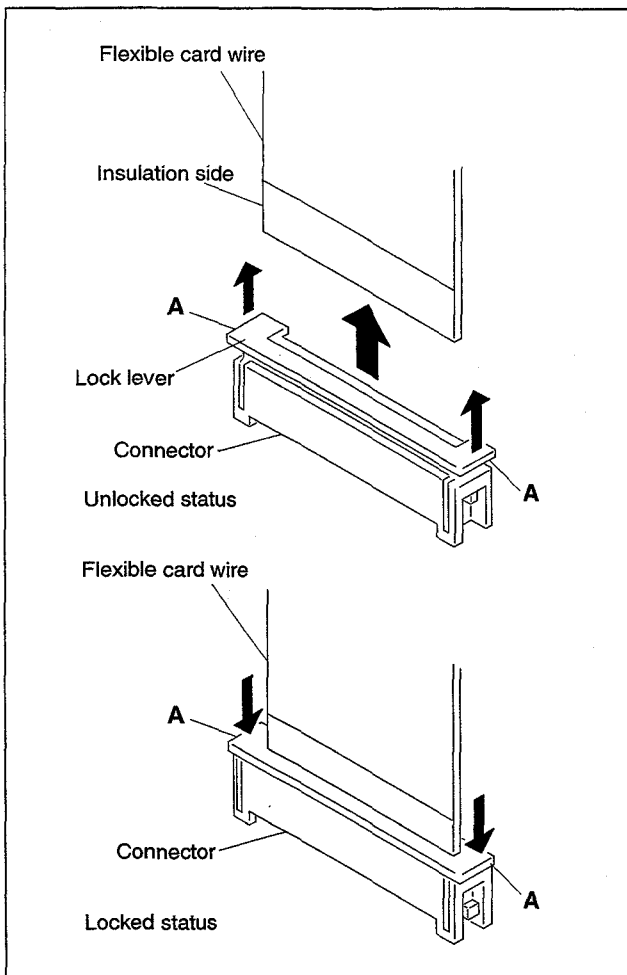
Life of flexible card wire will be significantly shortened if it is folded. Be very careful not to fold the flexible card wire.

Disconnecting

Slide portions A of the connector to unlock and pull out the flexible card wire.

Connecting

Insert the flexible card wire firmly as far as it will go, and push the portions A of the connector.



Notes

- The flexible card wire has the conduction side and the insulation side. Insert the flexible card wire to the connector so that the insulation side faces to lock lever side. If the conduction side and the insulation side are connected in the wrong direction, the circuit will not operate.
- Be careful not to insert the flexible card wire obliquely.
- Check that the conduction surface of the flexible card wire is not soiled with dust.

Section 3

Error Messages

3-1. Alarm Display

This unit has an alarm display function.

When a problem is detected, an alarm is displayed immediately in the timer counter block. The alarm and a message describing the countermeasure are displayed on a video monitor connected to the SUPER connector.

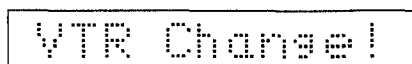
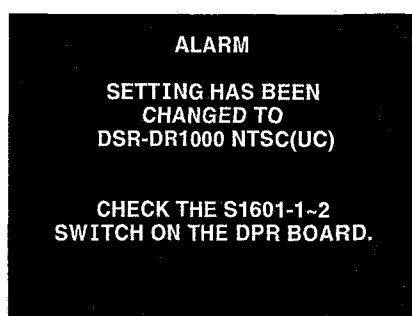
This unit has two types of alarms : one is for operators while the other is for service persons. This manual describes only the alarms for service persons. For details of alarms for operators, refer to the operating instructions. Activating the alarm display may influence the system, such as when the reference video signal is not used. Therefore, you can select whether or not to display the alarm from the Setup menu selection. As for Setup menu, refer to the operating instructions. However, the alarms for service persons are displayed regardless of the Setup menu setting.

3-1-1. Alarm Display when the Main Power is Turned On

Detection : Checks the settings of switch S1601-1 to 2 on the DPR-224 board and the contents of non-volatile memory (EEPROM).

Operation after detection : None

Display : The alarm is displayed until any key is pressed.

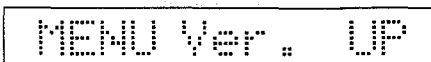
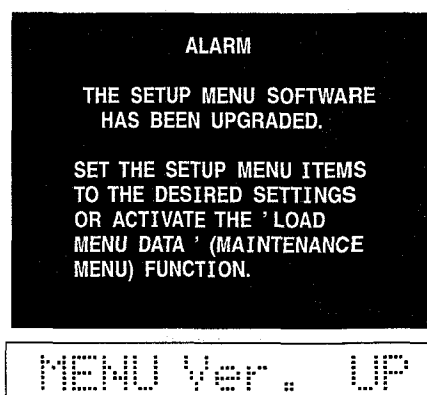


This example of the display is for
DSR-DR1000 (UC).

Detection : Checks the version of the Setup menu.

Operation after detection : The Setup menu operates using the factory settings. The contents of the non-volatile memory (EEPROM) remain unchanged. Therefore, if the setting of the Setup menu is not changed, the same alarm will appear when the main power is turned on.

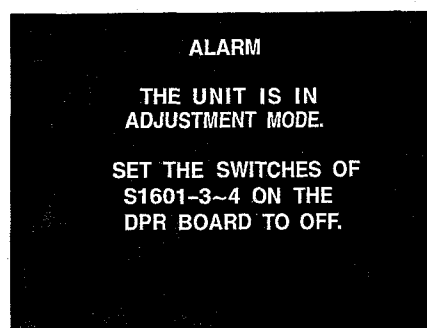
Display : The alarm is displayed until any key is pressed.



Detection : Checks that switches S1601-3 to 4 and S2301-5 to 7 on the DPR-224 board is set to ON.

Operation after detection : None

Display : The alarm is displayed until any key is pressed.

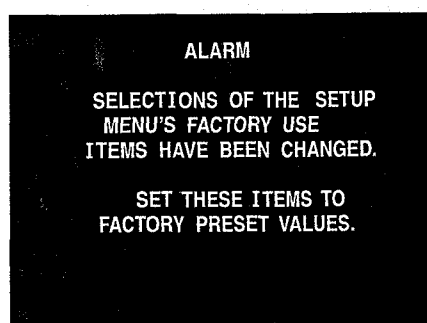


ADJ. mode!

Detection : Checks that the FACTORY USE item of the Setup menu is changed.

Operation after detection : None

Display : The alarm is displayed until any key is pressed.



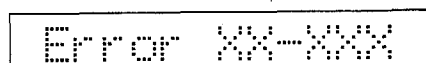
FACT. USE!

3-2. Error Codes

This unit has a self diagnostics function which detects internal abnormalities. When a problem is detected, an error code is displayed immediately in the time counter block, and details of the error appear on the video monitor connected to the SUPER connector.

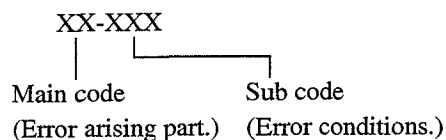
Note

An error code appears in the column shown by XX-XXX on the display.



3-2-1. Error Code Descriptions

The error code is displayed in the combination of a main code and a sub code.



Main code

- 40 : HDD system error
- 91 : Communication system and interface system error
- 92 : Synchronizing system error
- 95 : Communication error with digital process system ICs

Sub code

Refer to each description of error codes.

Note

The error is displayed until the error is recovered, but all function-key operations are possible while displaying the error code.

Main code 40 : HDD system error

Main code	Sub code	Description
40	000	Detected an HDD error.

Main code 91 : Communication system and interface system error

(The "system control" described below means IC2008 on the DPR-224 board.)

Main code	Sub code	Description
91	125	Communication between system control and keyboard was intermitted. (Detected by SY (IC2008/DPR-224 board).)
	130	System control detected abnormality of ROM (IC2105/DPR-224 board).
	131	System control detected abnormality of external memory.
	139	System control detected abnormality in setup menu data area (IC101/DY-19 board).
	13A	Detected abnormality in NVRAM (IC2313/DPR-224 board).
	13B	Detected abnormality in Hours Meter (IC101/DY-19 board).
	215	Communication between system control and keyboard was intermitted. (Detected by KY (IC102/DY-19 board).)

Main code 92 : Synchronizing system error

(The "system control" described below means IC2008 on the DPR-224 board.)

Main code	Sub code	Description
92	101	System control detected abnormality in REF FOE.
	102	System control detected abnormality in P-TRKT.
	103	System control detected abnormality in P-FLTT.
	104	System control detected abnormality in R-TRKT.
	105	System control detected abnormality in R-FLTT.
	10A	System control detected abnormality in REC FOE.

Main code 95 : Communication error with digital process system ICs

(The "system control" described below means IC2008 on the DPR-224 board.)

Main code	Sub code	Description
95	100	Communication error between system control and bridge (IC2601/DPR-224 board) is detected.
	101	Communication error between system control and south bridge (IC2201/DPR-224 board) is detected.
	102	Communication error between system control and i.LINK (IC2401/DPR-224 board) is detected.
	103	Communication error between system control and Ether (IC601/DIF-140 board) is detected.
	111	Communication error between system control and C1-R mode (IC1307/DPR-224 board) is detected.
	112	Communication error between system control and F1-R (IC1402/DPR-224 board) is detected.
	113	Communication error between system control and V2-R (IC1402/DPR-224 board) is detected.
	114	Communication error between system control and VAI-R (IC2901/DPR-224 board) is detected.
	115	Communication error between system control and Video Dec (IC100/DDE-18 board) is detected.
	116	Communication error between system control and DIF-R (IC801/DPR-224 board) is detected.
	117	Communication error between system control and AIFQ (IC1905/DPR-224 board) is detected.
	118	Communication error between system control and MPEG ENC (IC1801/DPR-224 board) is detected.
	119	Communication error between system control and ENC1 DSP (IC1101/DPR-224 board) is detected.
	11A	Communication error between system control and ENC2 DSP (IC1102/DPR-224 board) is detected.
	11B	Frame communication error between system control and A1-R Front (IC2701/DPR-224 board) is detected.
	11C	Track Pair communication error between system control and A1-R Front (IC2701/DPR-224 board) is detected.
	11D	Frame communication error between system control and A1-R Rear (IC2701/DPR-224 board) is detected.
	11E	Track Pair communication error between system control and A1-R Rear (IC2701/DPR-224 board) is detected.
	121	Communication error between system control and C1-P mode (IC1309/DPR-224 board) is detected.
	122	Communication error between system control and F1-P (IC1413/DPR-224 board) is detected.
	123	Communication error between system control and V2-P (IC1413/DPR-224 board) is detected.
	124	Communication error between system control and VAI-P (IC2901/DPR-224 board) is detected.
	125	Communication error between system control and Video Enc1 (IC100/DEN-20 board) is detected.
	126	Communication error between system control and Video Enc2 (IC101/DEN-20 board) is detected.
	127	Communication error between system control and NSG (IC2901/DPR-224 board) is detected.
	128	Communication error between system control and AIF-P (IC1505/DPR-224 board) is detected.
	129	Communication error between system control and MPEG DEC (IC1701/DPR-224 board) is detected.
	12A	Communication error between system control and DEC DSP (IC1202/DPR-224 board) is detected.

3-2-2. Display of Previously Detected Error Codes




When the DSR-DR1000/DR1000P detects an internal abnormality, an error code is memorized in EE-PROM.

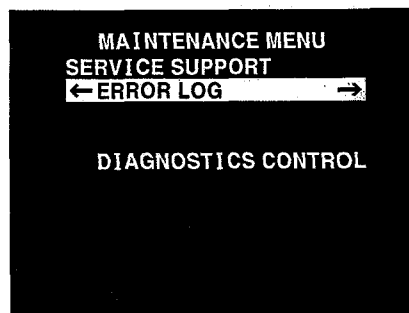
A maximum of eight error codes detected previously, starting from the latest error code, can be displayed.




Displaying the Past Error Codes

1. While pressing the  key, press the  key.



2. Move the cursor to SERVICE SUPPORT so that the letters are highlighted using the ,  keys, then press the  key.



3. Move the cursor to ERROR LOG so that the letters are highlighted using the ,  keys, then press the  key.
The display changes as shown to the right, and the error log appears.



Section 4

Maintenance Menu

4-1. Menu Structure

This unit has a maintenance menu which is used for maintenance.

The maintenance menu has a layered structure through which you move to perform the various checks, settings and adjustments using the specified menu items. Contents of the maintenance menu are displayed on the video monitor connected to the SUPER connector and the time counter of DSR-DR1000/DR1000P.

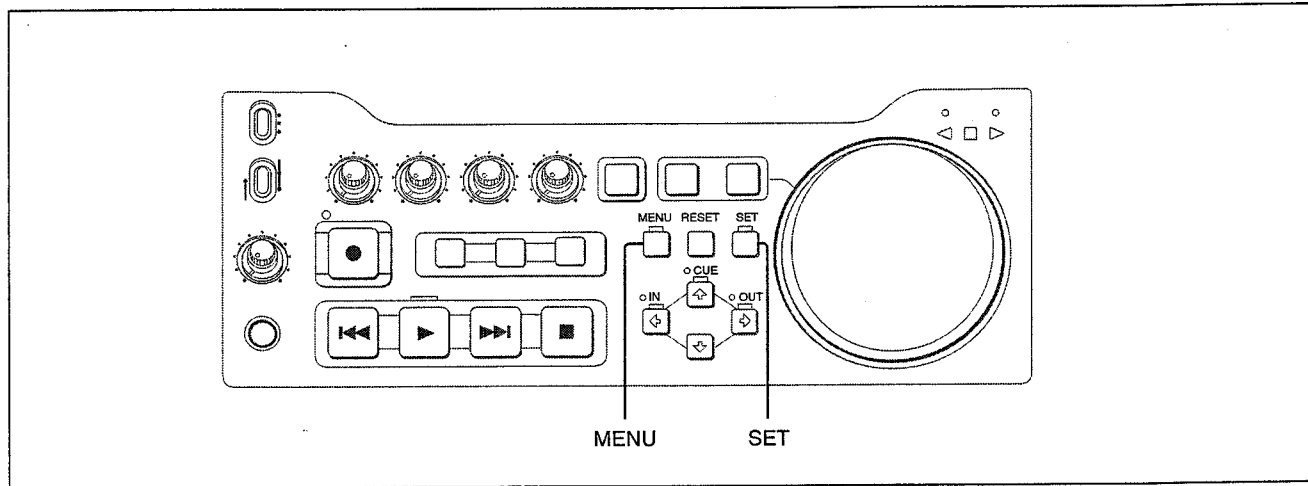
Values in parenthesis () are time counter display.

MENU, First layer	MENU, Second layer	MENU, Third layer
MENU DATA CONTROL (MENU CNT)	MENU STATUS DISPLAY (>MENU STA) SAVE MENU DATA (>Save MENU) LOAD MENU DATA (>Load MENU)	
DISK CHECK (Disk Check)	CHECK (>Check) RECOVER (>Recover) AGING (>Aging)	
SERVICE SUPPORT (Support)	ERROR LOG (>Error LOG)	
	DIAGNOSTICS CONTROL (>DIAG CNT)	CLEAR ERROR LOG (>>Clear LOG)
OTHERS (Others)	SOFTWARE VERSION (>Version) SERIAL NUMBER (>Serial No.) KEYBOARD CHECK (>KY Check)	
	MEMORY DISPLAY (>MEM Check)	SY MEMORY DISPLAY (>> SY MEM.) DY MEMORY DISPLAY (>> DY MEM.) PCI MEMORY DISPLAY (>> PCI MEM.) AVM MEMORY DISPLAY (>> AVM MEM.)
	DATA DISPLAY (>Data Check)	DEBUG DATA DISPLAY (>>DBG DATA)

4-2. Operating the Maintenance Menu

4-2-1. Location and Function of Switches

Use MENU ←, →, ↑, ↓, and SET switches on the control panel shown below to perform the maintenance menu.



The maintenance menu has a layered structure through which you move to select the desired item.

- ↑ KEY : Use this key to move in the direction of ↑ within the same layer.
- ↓ KEY : Use this key to move in the direction of ↓ within the same layer.
- ← KEY : Use this key to move in the direction of ← to higher layers.
- KEY : Use this key to move in the direction of → to lower layers. (It is inoperative if there is no lower layer.)

To indicate depth of layer, the displayed menu items are indented on the video monitor and ">" is added to the top on the time counter.

4-2-2. Entering the Maintenance Menu

1. While pressing the ← key, press the MENU key. The DSR-DR1000/DR1000P enters the maintenance menu. The maintenance menu appears on the video monitor.
2. Select the desired item using the ↑ key and the ↓ key. The cursor shown with a white background moves to the selected item.
3. After the desired item is selected, press the → key to designate the selected item.

4-2-3. Exiting the Maintenance Menu

Press the MENU key to exit the maintenance menu.



4-3. Contents of Maintenance Menu

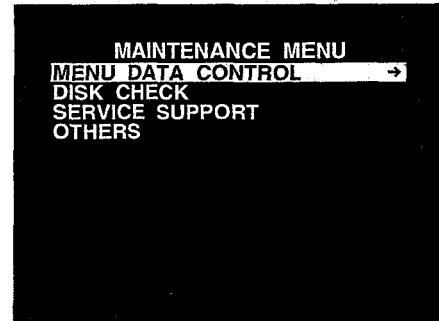
4-3-1. MENU DATA CONTROL

The MENU DATA CONTROL item provides a SETUP MENU data display and saving and loading the SET UP MENU data.


This item is used to return the settings to their original values after completing the maintenance or upgrading the ROM.

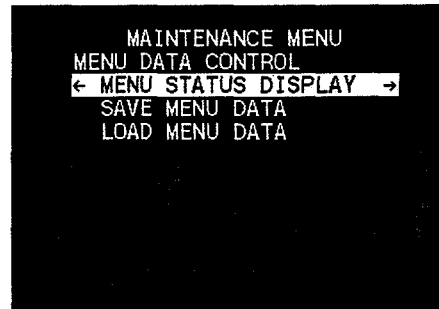
Operating procedure

1. Enter the maintenance menu.
2. Move the cursor to "MENU DATA CONTROL" which is displayed with a white background, using the ,  keys.








MENU CNT

3. Press the  key.
"MENU DATA CONTROL" is selected and its lower layer submenu appears.



>MENU STA


4. Move the cursor displayed with a white background to a desired item using the ,  keys.
5. When an item is selected, press the  key. The contents of the selected item appear.
6. Press the  key to exit MENU DATA CONTROL and return to the main menu.
7. Press the  key to exit the maintenance menu.


(1) MENU STATUS DISPLAY

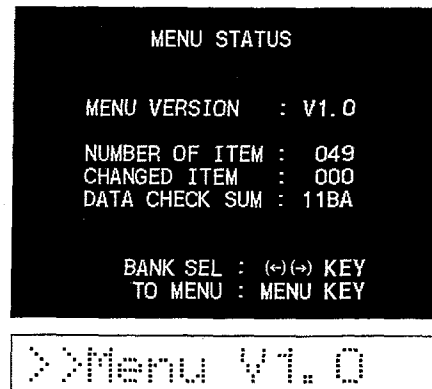
Displays the current status of the SET UP MENU data.

MENU VERSION : Version number of the SET UP MENU
NUMBER OF ITEM : Numbers of the SET UP MENU items
CHANGED ITEM : Numbers of the items which were
changed from the factory default
settings

DATA CHECK SUM : Data check sum


Pressing  key displays the status of the SET UP MENU
stored in the menu bank 1 to 4.


* Pressing the  key returns to the main menu.



(2) SAVE MENU DATA

This is used to temporarily save the user's setup menu data. A temporary saved data can be reset later.

1. The version of the current setup menu is displayed, and it is waiting to press the  key.

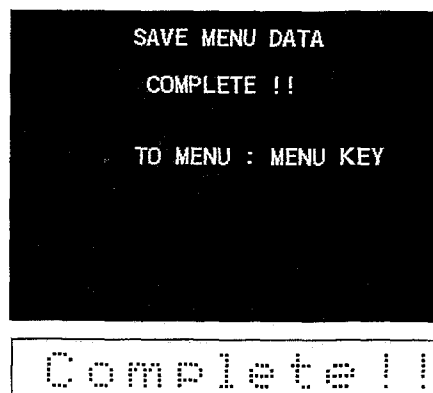
* Pressing the  key returns to the main menu.



2. Press the  key.

The SET UP MENU data is stored in EEPROM.

Confirm that [COMPLETE] appears and data saving is complete.



Notes

- Data which has once been saved will not be deleted by turning the main power on and off, or by upgrading the ROM version. However, the saved data is deleted when the DY-19 board or the EEPROM is replaced because the data is saved in the EEPROM in the DY-19 board.
- When the SET UP MENU is upgraded by ROM's version upgrade, an alarm message appears after the ROM is replaced. Either initialize the SET UP MENU or execute "LOAD MENU DATA" when the alarm appears.

(3) LOAD MENU DATA

The saved data is stored as ordinary SET UP MENU data when it is loaded.

1. The version number of the current SET UP MENU and that of the SET UP MENU to be loaded are displayed, and it is waiting to press the **SET** key.
* Pressing the **MENU** key returns to the main menu.

```
LOAD MENU DATA

SAVED      CURRENT
MENU       MENU
VERSION    VERSION
V1.0 ----> V1.0

LOAD OK ?

LOAD : SET KEY
TO MENU : MENU KEY
```

```
>>Load OK ?
```

2. Press the **SET** key.
The SET UP MENU data is stored in EEPROM.
Confirm that [COMPLETE] appears and data saving is complete.
* Pressing the **MENU** key returns to the main menu.

```
LOAD MENU DATA

COMPLETE !!

UNCHANGED DATA : 049
CHANGED DATA   : 0
ILLEGAL DATA   : 0
DELETED ITEM    : 0
ADDED ITEM      : 0

TO MENU : MENU KEY
```

```
COMPLETE !!
```

In the case of trouble :

Loading of the data will not start if SET UP MENU data has not been saved or the saved SET UP MENU data contains an error.



4-3-2. Disk Check

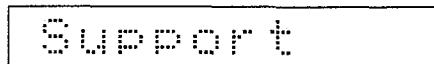
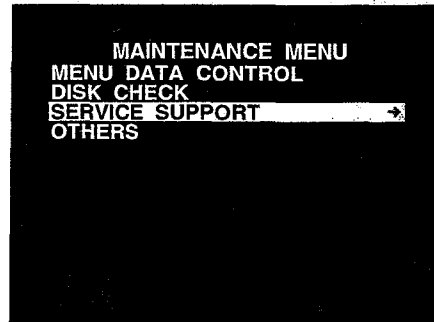
This menu will be added in future.


4-3-3. Service Support

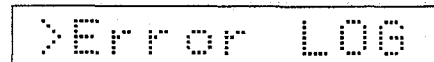
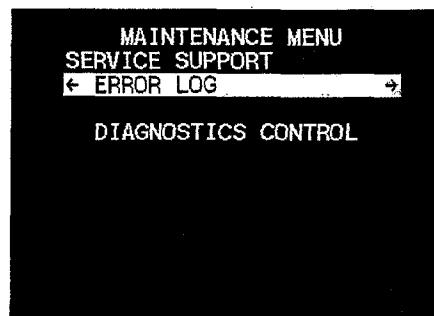
Displays the error codes and error contents which occurred in the past and provides the diagnosis.






Operating procedure

1. Enter the maintenance menu.
2. Move the cursor to "SERVICE SUPPORT" which is displayed with a white background using the ,  keys.



3. Press the  key.
"SERVICE SUPPORT" is selected and its lower layer sub-menu appears.

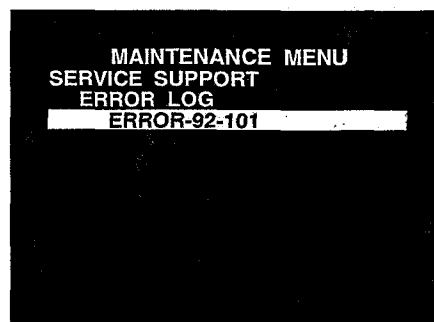


4. Move the cursor displayed with a white background to a desired item using the ,  keys.
5. When an item is selected, press the  key. The contents of the selected item appears. (For the check procedure, refer to the respective menu description.)
6. After completing the check, press the  key to return to the main menu.
7. To check other menus and submenus, repeat steps 4 to 6.
8. Press the  key to exit the maintenance menu.

1. ERROR LOG

The errors which occurred in the past are displayed.
(The latest eight maximum errors are displayed.)

* The latest error is displayed on the top.



2. DIAGNOSTICS CONTROL









① CLEAR ERROR LOG

Clears the error history from the ERROR LOG.

4-3-4. OTHERS

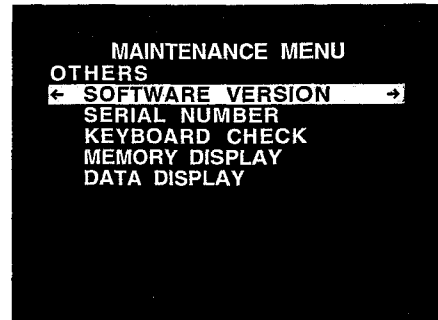
Enables to check the software version, keyboard and others.

Operating procedure

1. Enter the maintenance menu.
2. Move the cursor to "OTHERS" which is displayed with a white background using the ,  keys.
3. Press the  key.
"OTHERS" is selected and its lower layer submenu appears.
4. Move the cursor displayed with a white background to a desired item using the ,  keys.
5. When an item is selected, press the  key. The contents of the selected item appears. (For the check procedure, refer to the respective menu description.)
6. After completing the check, press the  key to return to the main menu.
7. To check other menus and submenus, repeat steps 4 to 6.
8. Press the  key to exit the maintenance menu.



Others

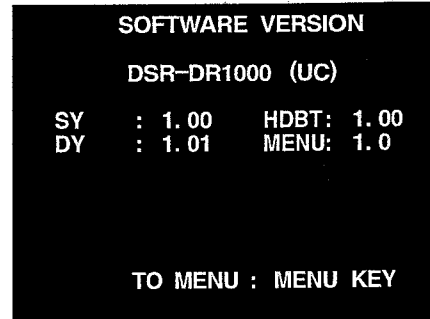


>Version


(1) SOFTWARE VERSION

Displays the model information and software version numbers.

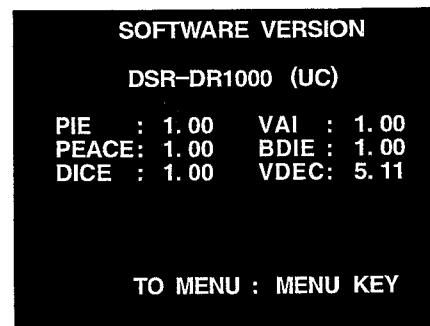
SY : Software version of HDD
DY : Version of IC102 on the DY-19 board
HDBT : Version of IC2008 on the DPR-224 board
MENU : Version of setup menu







This example of the display is for
DSR-DR1000 (UC).

Press the  key to display the version below.

PIE : Version of IC2601 on the DPR-224 board
PEACE : Version of IC2801 on the DPR-224 board
DICE : Version of IC2701 on the DPR-224 board
VAI : Version of IC2901 on the DPR-224 board
BDIE : Version of IC801 on the DPR-224 board
VDEC : Version of IC100 on the DDE-18 board



This example of the display is for
DSR-DR1000 (UC).

- * Contents which are shown in the time counter display can be changed using the ,  keys.
- * Press the  key or the  key to return to the maintenance menu.

(2) MEMORY DISPLAY

- * Factory use only.

(3) DATA DISPLAY

- * Factory use only.

Section 5

Replacement of Main Parts

5-1. HDD Replacement

WARNING

Turn off the power and unplug the power cord before removing/reattaching a part.

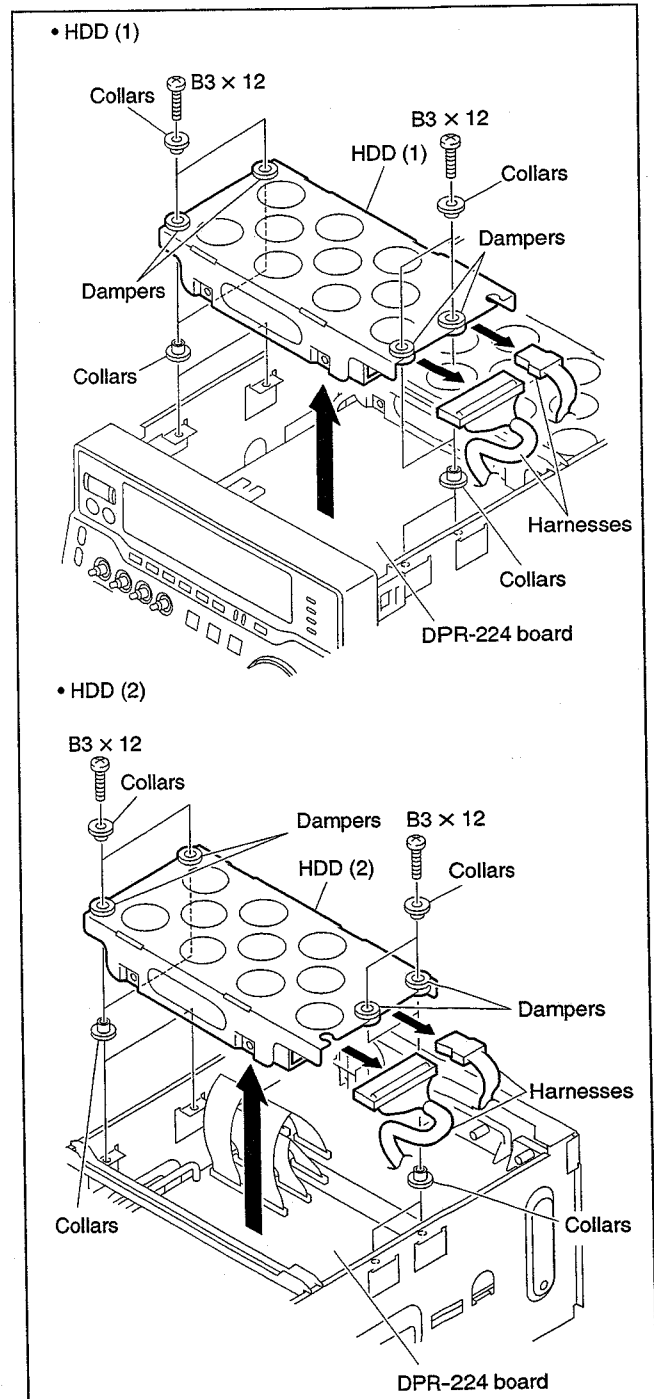
Notes

- When replacing a HDD, be sure to wear a grounded earth-band to protect against static electricity.
- Be very careful of the handling of the HDD. Avoid physical shock and vibrations to the HDD.
- Two HDDs are installed in this unit.
Be sure to connect harnesses of the HDD (1) at the front and HDD (2) at the rear respectively to the following connectors on the DPR-224 board.
HDD (1): CN2201/DPR-224 board
CN103/DPR-224 board
HDD (2): CN2202/DPR-224 board
CN103/DPR-24 board
- The HDD prepared as a service part is formatted at the factory.
- Use the following torque driver to tighten the screw.
 - Torque driver bit (M3):
Sony part No. J-6323-430-A
 - Torque driver, shockless (12 kg):
Sony part No. J-6530-070-A
 Tightening torque: $78.4 \times 10^{-2} \text{ N}\cdot\text{m}$

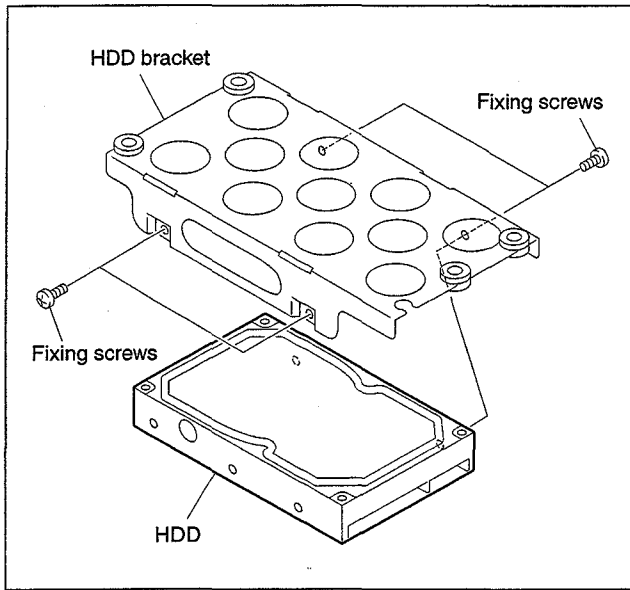
1. Remove the top plate. (Refer to Section 2-3.)
2. Remove the four screws securing each HDD, and lift the HDD carefully up not to bump against the chassis. Disconnect the two harnesses connected to the DPR-224 board from the HDD.

Note

Be careful not to lose the two collars on each damper (above and below).



3. Remove the four screws to remove the HDD bracket.



4. To reattach the HDD, reassemble the parts in the reverse order of steps 1 to 3.

Notes

- When reattaching the HDD (1), ensure that the harnesses are reconnected to the original connectors CN2201 and CN103 of the DPR-224 board.
- Be sure to use the specified fixing screws when reattaching the HDD bracket to the HDD.

5-2. KY Frame Assembly and the Components Replacement

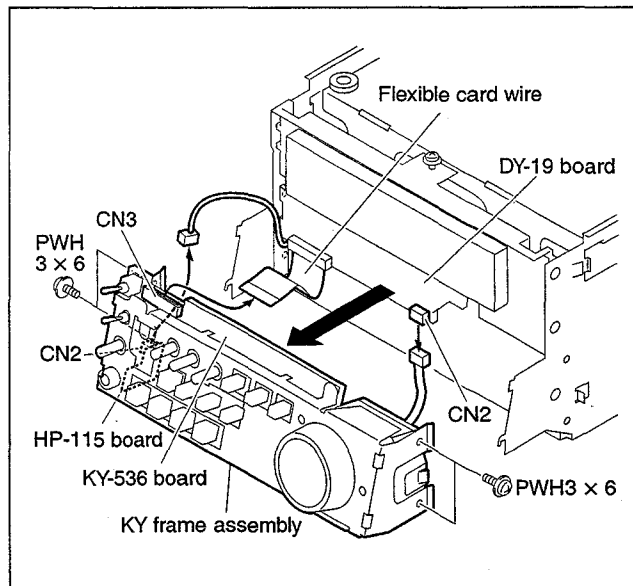
5-2-1. KY Frame Assembly

1. Remove the top plate and front panel assembly. (Refer to Section 2-3.)
2. Remove the four screws, and remove the KY frame assembly in the arrow direction.
3. Disconnect the flexible card wire from CN3 of the KY-536 board.

Note

Life of flexible card wire will be significantly shortened if it is folded. Be very careful not to fold the flexible card wire.

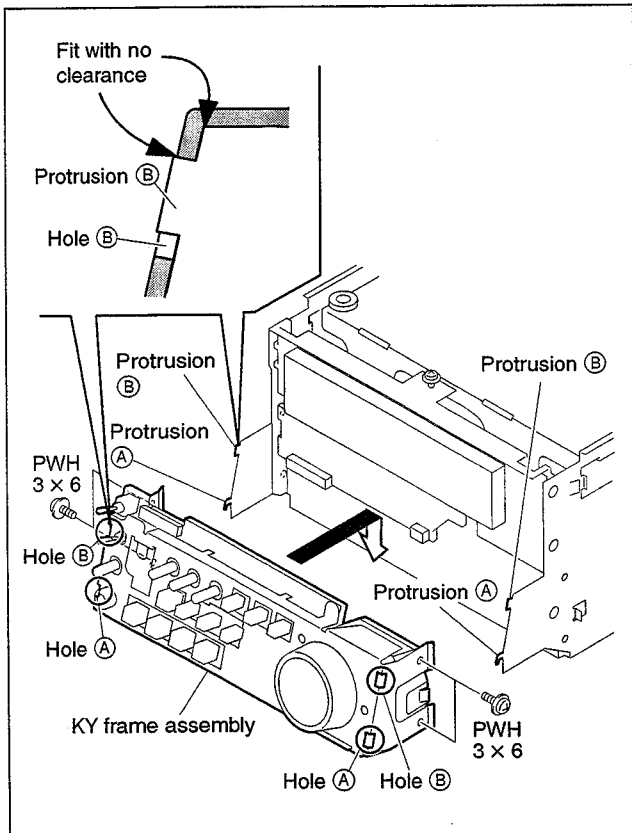
4. Disconnect the harnesses from CN2 of the DY-19 board and CN2 of the HP-115 board.



5. To reattach the KY frame assembly, reassemble the parts in the reverse order of steps 1 to 4.

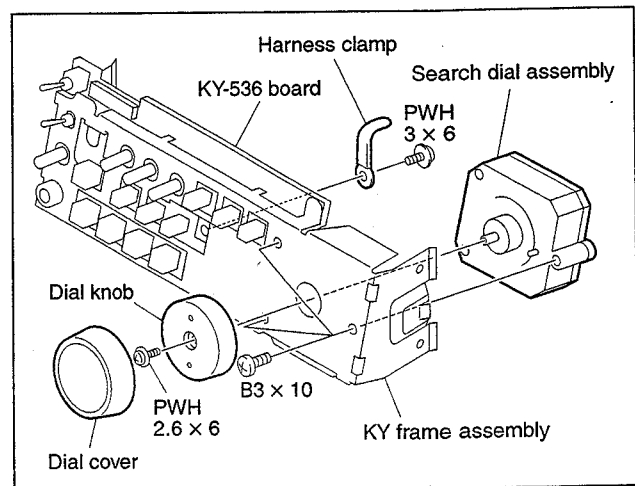
Note

When reassembling, put the protrusions (A) of the main chassis into the holes (A) of the KY frame first, and put the protrusions (B) into the holes (B) of the KY frame. While pressing down the KY frame assembly against the main frame, fix the KY frame assembly with the four screws.



5-2-2. Search Dial Assembly

1. Remove the top plate and front panel assembly. (Refer to Section 2-3.)
2. Remove the KY frame assembly. (Refer to Section 5-2-1.)
3. Remove the screw fixing the KY-536 board, and remove the harness clamp.
4. Remove the dial cover and one screw to remove the dial knob.
5. Remove the three screws to remove the search dial assembly from the KY frame assembly.



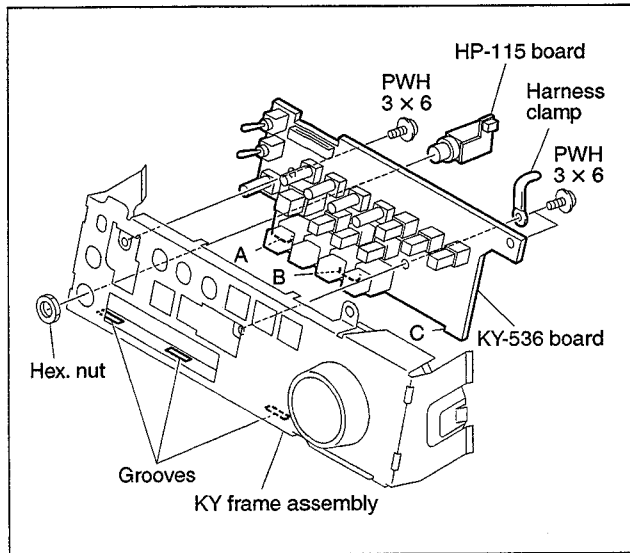
6. To reattach the search dial assembly, reassemble the parts in the reverse order of steps 1 to 5.

Note

When reassembling, apply locking compound onto the screw fixing the dial knob.

5-2-3. KY-536/HP-115 Boards

1. Remove the top plate and front panel assembly.
(Refer to Section 2-3.)
2. Remove the KY frame assembly.
(Refer to Section 5-2-1.)
3. Remove the hex. nut to remove the HP-115 board from the KY frame assembly.
4. Remove the three screws and harness clamp, and then remove the KY-536 board from the KY frame assembly.



5. To reattach these boards, reassemble the parts in the reverse order of steps 1 to 4.

Note

When reassembling, put the projections (A), (B) and (C) at the bottom of the KY-536 board into the grooves of the KY frame with the KY-536 board pressed against the KY frame.

5-3. Boards Replacement

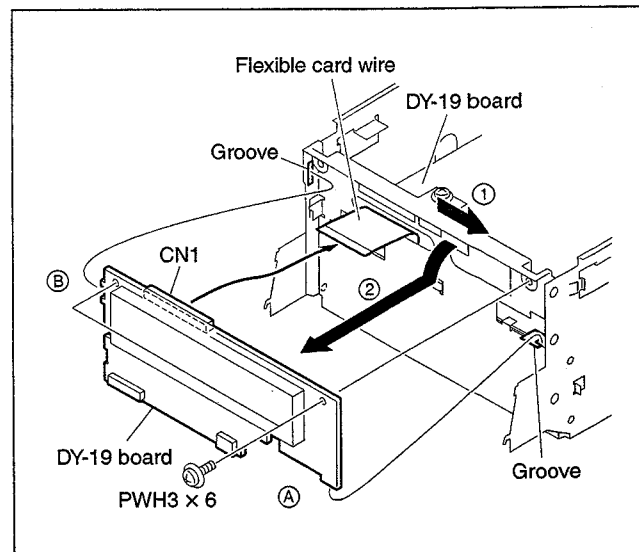
5-3-1. DY-19 Board

1. Remove the top plate and front panel assembly.
(Refer to Section 2-3.)
2. Remove the HDD (1). (Refer to Section 5-1.)
3. Remove the KY frame assembly.
(Refer to Section 5-2-1.)
4. Disconnect the flexible card wire from CN1 of the DY-19 board.

Note

Life of flexible card wire will be significantly shortened if it is folded. Be very careful not to fold the flexible card wire.

5. Remove the two screws, and slightly slide the DY-19 board in the arrow ① direction, then slide it to the arrow ② direction to remove.



6. To reattach the board, reassemble the parts in the reverse order of steps 1 to 5.

Note

When reassembling, put the projections (A) and (B) of the DY-19 board into the grooves of the main chassis.

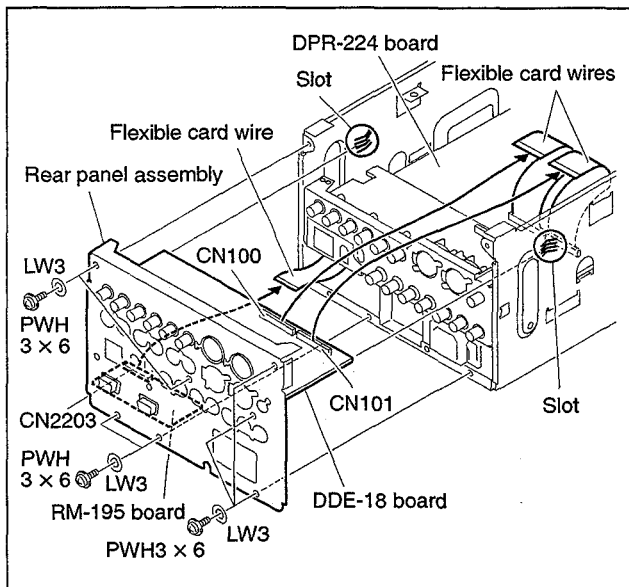
5-3-2. DDE-18/RM-195 Boards

1. Remove the top plate and front panel assembly.
(Refer to Section 2-3.)
2. Remove the seven screws and seven washers, and pull out the rear panel assembly while disconnecting the flexible card wires from CN100 and CN101 of the DDE-18 board.

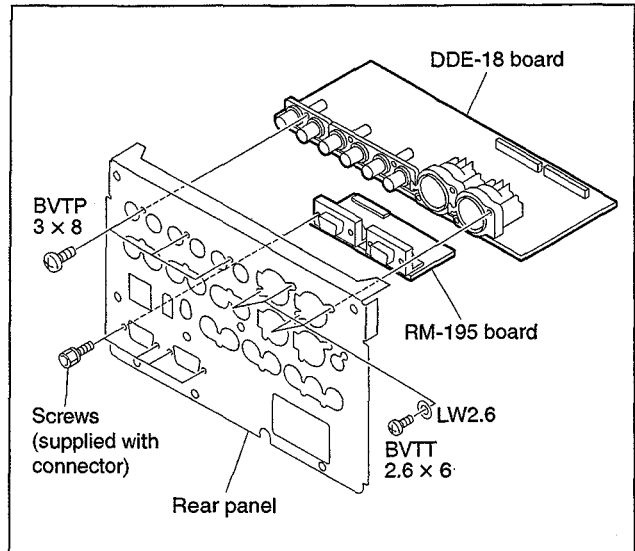
Note

Life of flexible card wire will be significantly shortened if it is folded. Be very careful not to fold the flexible card wire.

3. Disconnect the flexible card wire from CN2203 of the RM-195 board, and then remove the rear panel assembly.



4. Remove the seven screws and four washers to remove the DDE-18 board from the rear panel assembly.
5. Remove the four screws (supplied with connector) to remove the RM-195 board from the rear panel assembly.



6. To reattach these boards, reassemble the parts in the reverse order of steps 1 to 5.

Note

Insert the DDE-18 board into the slots of the side chassis when reattaching the rear panel assembly to the unit.

5-3-3. DPR-224/DEN-20/DIF-140 Boards

1. Remove the top plate. (Refer to Section 2-3.)
2. Remove the HDD (1) and HDD (2).
(Refer to Section 5-1.)
3. Remove the rear panel assembly.
(Refer to steps 1 to 3 in Section 5-3-2.)
4. Remove the six screws. Grasp the handle, and lift the DPR-224 board up in the arrow ① direction to disconnect the connector (CN102) of the switching regulator.

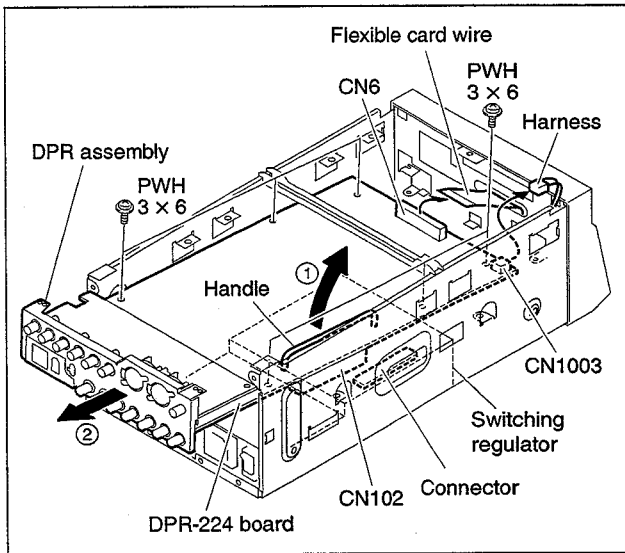
Note

Do not apply a force to the mounted parts on the board when removing the board with the handle.

5. Pull the DPR assembly out slowly in the arrow ② direction.
6. Disconnect the flexible card wires and harness from CN6 and CN1003 of the DPR-224 board.

Note

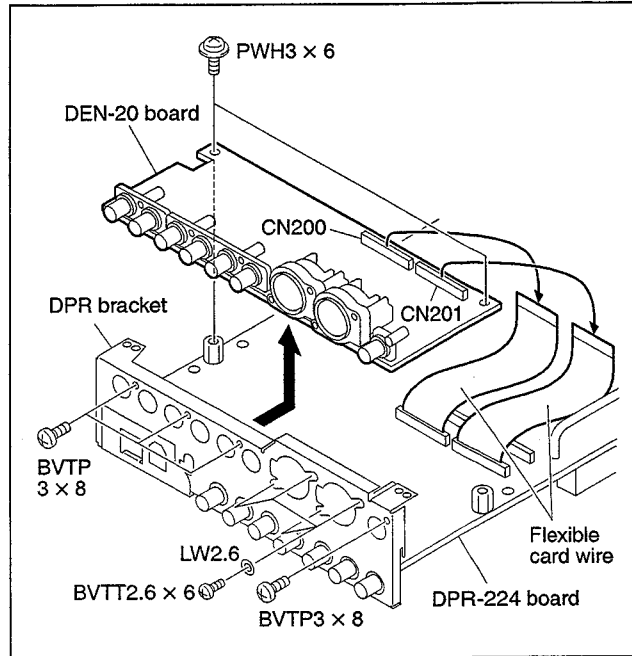
Life of flexible card wire will be significantly shortened if it is folded. Be very careful not to fold the flexible card wire.



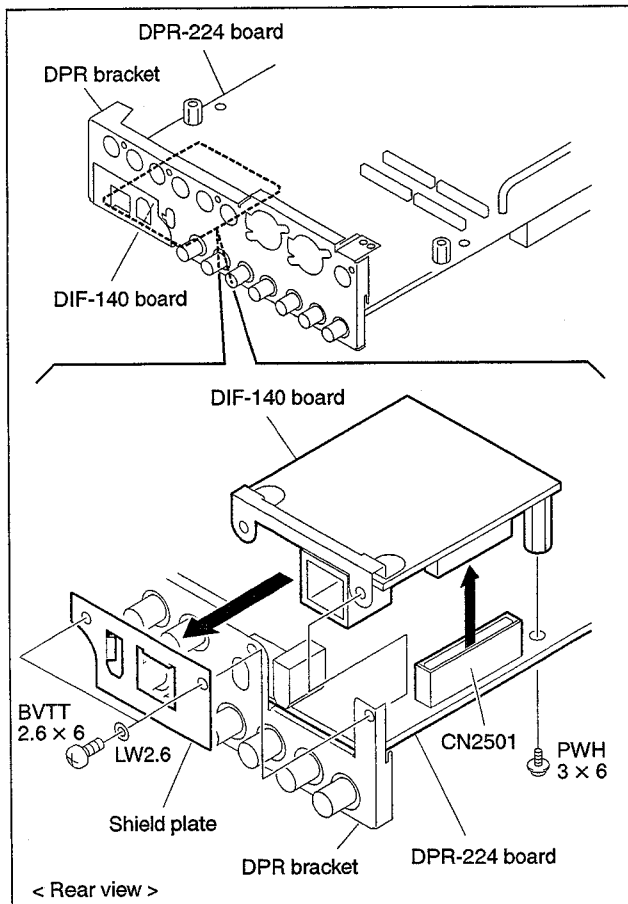
7. Remove the ten screws and four washers, and disconnect the two flexible card wires to remove the DEN-20 board from the DPR bracket.

Note

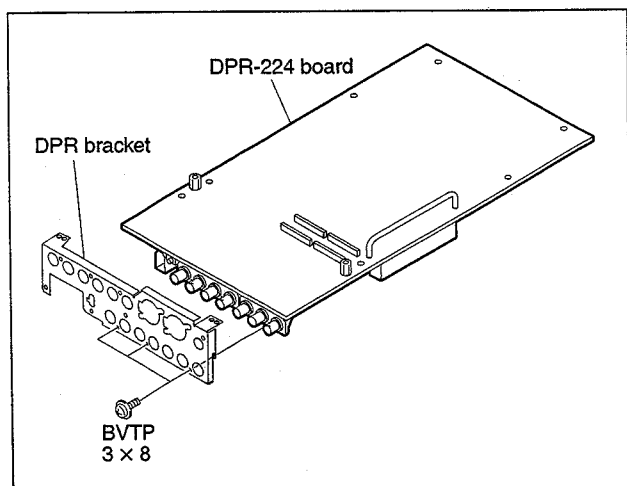
Life of flexible card wire will be significantly shortened if it is folded. Be very careful not to fold the flexible card wire.



8. Remove the three screws and two washers, and disconnect the DIF-140 board from CN2501 of the DPR-224 board in the arrow direction to remove.
9. Remove the shield plate from the DIF-140 board.



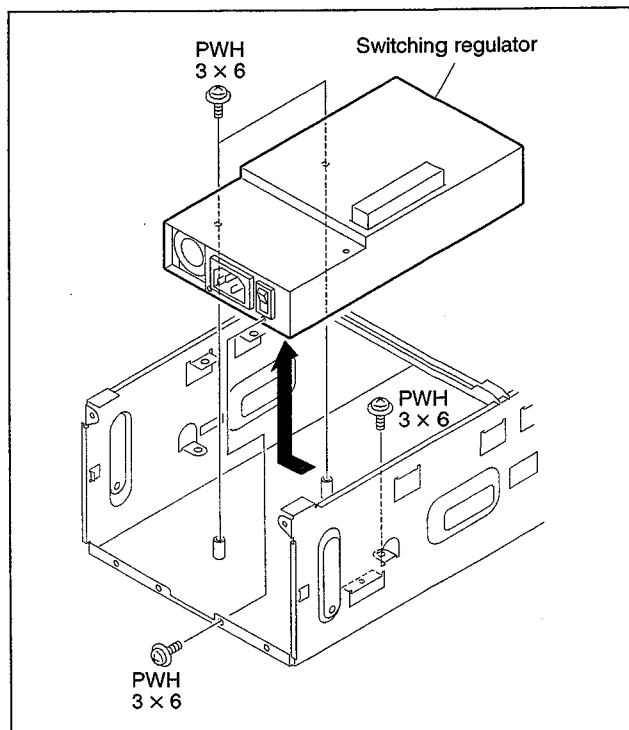
10. Remove the three screws to remove the DPR-224 board from the DPR bracket.



11. To reattach these boards, reassemble the parts in the reverse order of steps 1 to 10.

5-4. Switching Regulator Replacement

1. Remove the top plate. (Refer to Section 2-3.)
2. Remove the HDD (1) and HDD (2). (Refer to Section 5-1.)
3. Remove the DPR assembly. (Refer to steps 1 to 6 in Section 5-3-3.)
4. Remove the four screws, and remove the switching regulator in the arrow direction.



5. To reattach the switching regulator, reassemble the parts in the reverse order of steps 1 to 4.

Electrical Alignment

6-1. Electrical Alignment Overview

6-1-1. Adjustment Points

DEN-20 Board

RV101	Y/CPST level adjustment	6-2-1
RV102	CPST (SUPER) level adjustment	6-2-2

Front Panel

SYNC	SYNC phase adjustment.....	6-2-3
SC	SC phase adjustment.....	6-2-4

DPR-224 Board

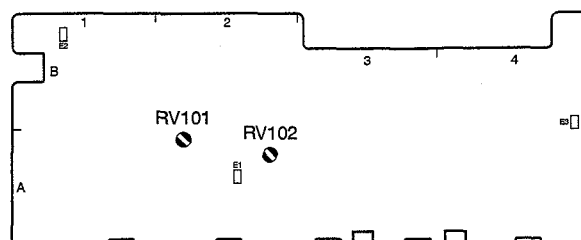
RV101	SDI free-running frequency adjustment	6-3
RV401	SDI free-running frequency adjustment	6-3
RV1302	HCK frequency adjustment	6-4

6-1-2. Measuring Equipment

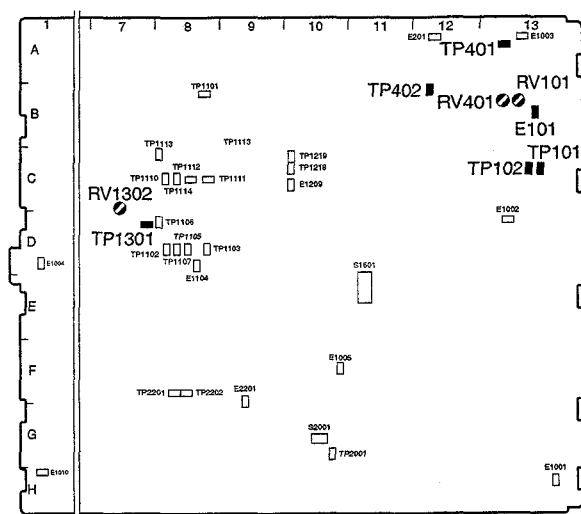
Equipment	Type
Oscilloscope	TEKTRONIX TDS460A or equivalent
Video signal generator	TEKTRONIX TSG-130A or equivalent (for NTSC)
	TEKTRONIX TSG-131A or equivalent (for PAL)
Frequency counter	ADVANTEST TR5821 or equivalent

6-1-3. Locations for Adjustment Point

DEN-20 Board (A side)



DPR-224 Board (A side)



6-2. Video Adjustment

Setting the Switch and SETUP MENU

These settings should be fixed in the following positions unless otherwise specified.

Switch

KEY INHI/LOCAL/REMOTE: LOCAL

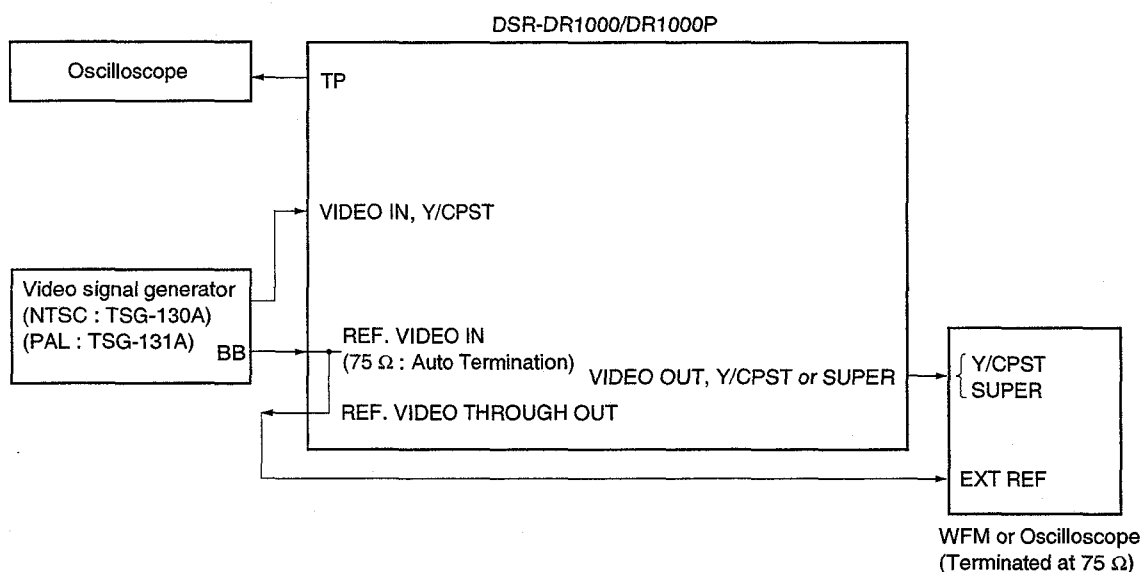
SETUP MENU

CHARA.DISPLAY:	ON	PROCESS CONTROL
SETUP REMOVE:	OFF	CHROMA GAIN: 200H (Factory shipping state)
SETUP ADD:	OFF	VIDEO GAIN: 200H (Factory shipping state)
		CHROMA PHASE: 80H (Factory shipping state)
		SETUP LEVEL: 200H (Factory shipping state)

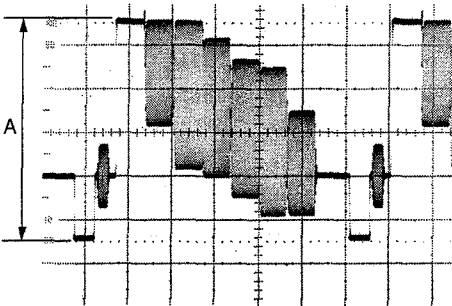
Connection

Connect the equipment as follows unless otherwise specified.

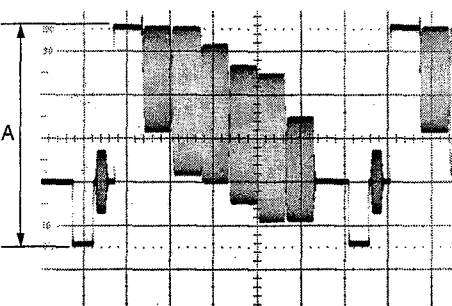
(Connection diagram)



6-2-1. Y/CPST Level Adjustment

Conditions for adjustment	Specification	Adjustment
WFM or oscilloscope • AUTO EE SELECT/MENU: EE • INT VIDEO SG/MENU: 75 % color bars (for NTSC) 100 % color bars (for PAL) • VIDEO OUTPUT/MENU: COMPOSITE	VIDEO OUT, Y/CPST (SUPER)/connector panel (Terminated with 75 Ω) TRIG: REF. VIDEO  Spec.: $A = 1.00 \pm 0.02$ V	RV101/DEN-20 (A-2)

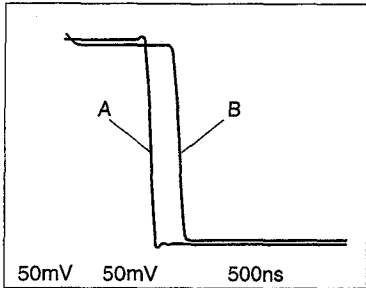
6-2-2. CPST (SUPER) Level Adjustment

Conditions for adjustment	Specification	Adjustment
WFM or oscilloscope • AUTO EE SELECT/MENU: EE • INT VIDEO SG/MENU: 75 % color bars (for NTSC) 100 % color bars (for PAL) • VIDEO OUTPUT/MENU: COMPOSITE	VIDEO OUT, Y/CPST (SUPER)/connector panel (Terminated with 75 Ω) TRIG: REF. VIDEO  Spec.: $A = 1.00 \pm 0.02$ V	RV102/DEN-20 (A-2)

6-2-3. SYNC Phase Adjustment

Note

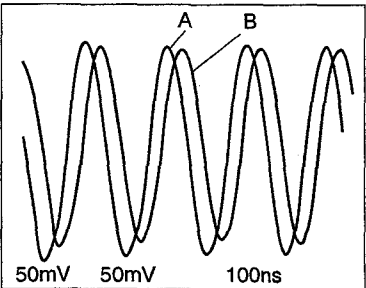
The SYNC Phase adjustment and SC Phase adjustment described in next section should be performed after the DEN-20 board adjustments (Sections 6-2-1 and 6-2-2) were completed.

Conditions for adjustment	Specification	Adjustment
WFM or oscilloscope • AUTO EE SELECT/MENU: EE • REF. VIDEO IN/connector panel: Input black burst signal • INPUT SELECT VIDEO button/front panel: COMPOSITE • VIDEO IN, Y/CPST/connector panel: Input black burst signal • VIDEO OUTPUT/MENU: COMPOSITE	Oscilloscope CH1 REF. VIDEO THROUGH OUT/connector panel (Terminated with 75 Ω) Oscilloscope CH2 VIDEO OUT, Y/CPST/connector panel (Terminated with 75 Ω)  Spec.: Align both falling edges of SYNC A and SYNC B.	● SYNC/front panel

6-2-4. SC Phase Adjustment

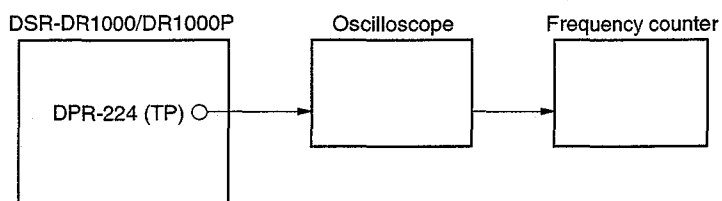
Note

Be sure to perform this adjustment after the SYNC phase adjustment is completed.

Conditions for adjustment	Specification	Adjustment
WFM or oscilloscope • AUTO EE SELECT/MENU: EE • REF. VIDEO IN/connector panel: Input black burst signal • INPUT SELECT VIDEO button/front panel: COMPOSITE • VIDEO IN, Y/CPST/connector panel: Input black burst signal • VIDEO OUTPUT/MENU: COMPOSITE Notes • Set the trigger of the waveform at the stable burst portion. • Set the oscilloscope in CHOP mode.	Oscilloscope CH1 REF. VIDEO THROUGH OUT/connector panel (Terminated with 75 Ω) Oscilloscope CH2 VIDEO OUT, Y/CPST/connector panel (Terminated with 75 Ω)  Spec.: Overlap both waveforms of A and B.	● SC/front panel

6-3. SDI Free-running Frequency Adjustment

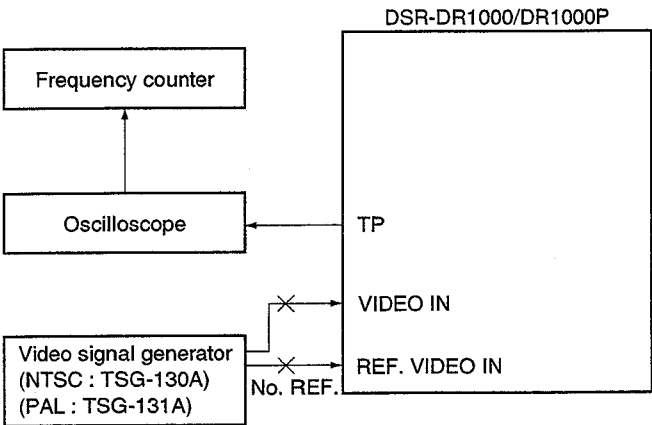
(Connection diagram)



Conditions for adjustment	Specification	Adjustment
Step 1 <ul style="list-style-type: none"> • AUTO EE SELECT/MENU: EE • Short-circuit TP101 (C-13) and E101 (B-13) on the DPR-224 board with a jumper lead. • After the adjustment is completed, remove the jumper lead. 	TP102/DPR-224 (C-13) Spec.: 27.0 ± 0.1 MHz	●RV101/DPR-224 (B-13)
Step 2 <ul style="list-style-type: none"> • AUTO EE SELECT/MENU: EE • Short-circuit between TP402 (B-12) and E101 (B-13) on the DPR-224 board with a jumper lead. • After the adjustment is completed, remove the jumper lead. 	TP401/DPR-224 (A-13) Spec.: 27.0 ± 0.1 MHz	●RV401/DPR-224 (B-13)

6-4. HCK Frequency Adjustment

(Connection diagram)



DPR-224 Board

Conditions for adjustment	Specification	Adjustment
Frequency counter <ul style="list-style-type: none">• STOP mode• REF VIDEO IN/connector panel: Input no signal• INPUT SELECT VIDEO button/front panel: COMPOSITE• VIDEO IN, Y/CPST/connector panel: Input no signal	TP1301/DPR-224 (D-7) Spec.: $f = 27,000,000 \pm 70 \text{ Hz}$	RV1302/DPR-224 (C-7)

Section 7

Semiconductor Pin Assignments

The following describes the semiconductor types used in this unit.

For semiconductors marked with page numbers in the index, refer to the corresponding pages in this section. However, in some cases incompatible types are also listed, therefore, when a part is to be replaced, also refer to the Spare Parts section.

In addition, for semiconductors with ID Nos., refer to the separate CD-ROM titled "Semiconductor Pin Assignments" (Sony Part No. 9-968-546-xx) that allows searching for parts by semiconductor type or ID No.

The semiconductors in the manual or on the CD-ROM are listed by equivalent types. Thus the external view or the index mark indication may differ from the actual type. Pin assignments and block diagrams are based on the IC manufacturer's data book.

本機に使用されている半導体型名の一覧を下記に示します。索引中、ページが記載されている半導体は、本章の該当ページを参照してください。ただし、互換性のない型名を併記している場合がありますので、部品を交換するときは、Spare Partsの章を参照してください。

また、ID番号が記載されている半導体は、別途発行の "Semiconductor Pin Assignments" CD-ROM版 (ソニー部品番号: 9-968-546-xx) を参照してください。半導体型名またはID番号から検索ができます。

マニュアルまたはCD-ROMに掲載されている半導体は、それぞれの機能を等価的に表わしたものです。外観やインデックスマークの表示方法が実物と異なる場合があります。ピン配置およびブロック図はICメーカーのデータブックに従いました。

DIODE	Page or ID No.
1SS184	DC001-03
1SS187-TE85L	DC001-05
1SS223	DC001-05
1SS300-TE85L	DC001-02
1SS301-TE85L	DC001-03
1SS302	DC001-01
1SS302-TE85L	DC001-01
DA204U	DC001-01
DA204UT106	DC001-01
DAN217	DC001-01
DAN217-T146	DC001-01
DAP202U	DC001-02
DAP202UT106	DC001-02
EC11FS4-TE12L	DC007-01
HSM88WK	DC001-03
HSM88WK-TL	DC001-03
KV1470(5MA)	DC001-13
KV1470TL00	DC001-13
NSQ03A04	DC007-01
NSQ03A04-TE16L	DC007-01
RD15ES-B1	DA001-02
RD15ES-T1B	DA001-02
RD6.2SB	DC008-04
RD6.2SB-T1	DC008-04
RD7.5ES-B2	DA001-02
RD7.5ES-T1B	DA001-02
SB05-05CP(RECTI)	DC001-06
SB05-05CP-TB	DC001-06

LED	Page or ID No.
CL-191HR-CD-T	LC004-02
CL-191YG-CD-T	LC004-01
CL-200HR-C-TSL	LC008-04
CL-200HR-C-TUL	LC008-04
CL-200PG-C-TU	LC008-01
TRANSISTOR	Page or ID No.
2SA1162G	TC001-01
2SA1162G-TE85L	TC001-01
2SA1611-M5M6	TC001-01
2SA1611T1-M5M6	TC001-01
2SB1115A	TC002-01
2SB1115A-T1YQYP	TC002-01
2SB624-BV345	TC001-01
2SB624T1-BV345	TC001-01
2SC2712-YG	TC001-02
2SC2712G-TE85L	TC001-02
2SC2982C-TE12L	TC002-02
2SC3303-Y	TR031-01
2SC3303-Y(TE16L)	TR031-01
2SC3356-K	TC001-02
2SC3356-T1K	TC001-02
2SC4177	TC001-02
2SC4177-T1L5L6	TC001-02
2SC4213-B	TC001-02
2SC4213B-TE85L	TC001-02
2SK425-T1X15	TC001-05
2SK425-X15	TC001-05
2SK663	TC001-05
2SK852-T1X3	TC001-05
DTA123JE	TC001-04
DTA123JE-TL	TC001-04

TRANSISTOR	Page or ID No.
DTA144EE	TC001-04
DTA144EE-TL	TC001-04
DTC123JE	TC001-03
DTC123JE-TL	TC001-03
DTC144EE	TC001-03
DTC144EE-TL	TC001-03

RN4904(TE85R) 7-3

SI2301DS-T1 TC001-20

IC	Page or ID No.
----	----------------

74LCX245MTCX TC74HC245P

ADV7300 7-4

ADV7300AKST 7-4

AK4324-VF-E2 AK4324-VF-E2

AK5352-VF-E2 AK5352-VF-E2

AK5352-VF-E2 AK5352-VF-E2

AK6417AM-E2 AK6417AM-E2

AL422B-TEL AL422B-TEL

BA033FP L78M05T-FA

BA033FP-E2 L78M05T-FA

BA05FP L78M05T-FA

BA05FP-E2 L78M05T-FA

BA18BC0FP-E2 BA18BC0FP-E2

CXB1341R CXB1341R

CXB1342R CXB1342R

CXD1216M CXD1216M

CXD1216M-TH CXD1216M

CXD1934Q 7-5

CXD2712R CXD2712R

CXD2913AQ CXD2913AQ

CXD3106R CXD3106R

CXD8517Q CXD8517Q

CXD8525N(E2) CXD8525N

CXD8525N-E2 CXD8525N

CXD9125R CXD9125R

CXD9127R CXD9127R

CXD9141R CXD9141R

CY7C1021BV33-15ZCT IDT71V016S20Y-TL

GD82559ER GD82559ER

HD6417751F167 7-6

HD64F3048VTF8 HD64F3048F

HY57V161610DTC-7TR MB81F161622B-80FN

HY57V561620BT-HDR 7-7

HY57V641620HGT-H TC59S6416BFTL-10

HY57V643220CT-7TR MB811643242A-100FN

IDT49FCT3805PY-TL IDT49FCT805SO

LM1881M LM1881N

IC	Page or ID No.
----	----------------

LM1881MX LM1881N

LM2901M NJM2901N

LMH6642MFX AD8055ART-REEL7

LMH6642MFX/NOPB AD8055ART-REEL7

LP3964EMPX-ADJ 7-7

M1543C-B1 7-8

M48T08Y-10MH1TR 7-11

MAX314CSE-TE2 MAX314CSE

MAX843ISA-T MAX843ISA-T

MBM29LV160BE-90TN MBM29LV160B-90PTFN

MSM9202-03GS-K 7-11

NJM062M RC4558

NJM062M-TE2 RC4558

NJM2068M-D(TE2) RC4558

NJM2068M-D-TE2 RC4558

NJM2267M NJM2267M_TE2

NJM2267M(TE2) NJM2267M_TE2

NJM2901M-TE2 NJM2901N

NJM2903V(TE2) UA393DC

NJM360M LM360N

NJM360M-TE2 LM360N

NJM4556AM RC4558

NJM4556AM-A-TE2 RC4558

NJM4556AV(TE2) RC4558

NJM4558V(TE2) RC4558

NJM4558V-TE2 RC4558

NJM4580E-D RC4558

NJM4580E-D-TE2 RC4558

NJM4580V(TE2) RC4558

NJM4580VTE2 RC4558

NJU7211U50-TE1 S-80250AG-GB

PLL1700E/2K PLL1700E_2K

RH5RL50AA-T1 NJU7201U50

S-80928CNNB-G8Y-T2 7-12

SI-3025LSA-TL SI-3018LS-TL

SN74LV244APWR TC74HC244P

SN74LV245APWR TC74HC245P

SN74LV541APWR MC74HC541N

SN74LVC245APW(E20) TC74HC245P

SN74LVC245APWR TC74HC245P

SN74LVC74APWR TC74HC74P

SN74LVCC4245APWR 74LVX4245QSCX

SN74LVTH16245ADGGR IDT74FCT16245ATPV-TR

SN74LVTH245APW(R) SN74LVTH245APW-E05

SN74LVTH245APWR SN74LVTH245APW-E05

SN75107ANSR SN75107AN

SN75C1168NS(R) SN75C1168NS

SN75C1168NSR SN75C1168NS

SSM-2142SR SSM-2142S

TC74HC4052AFT(EL) MC74HC4052N

TC74VHC04FT(EL) TC74HC04P

TC74VHC123AFT(EL) TC74HC123P

TC74VHC125FT(EL) MC74HC125N

TRANSISTOR

IC Page or ID No.

TC74VHC138FT(EL)	TC74HC138P
TC74VHC245FT(EL)	TC74HC245P
TC74VHC32FT(EL)	TC74HC32P
TC74VHC367FT(EL)	TC74HC367P
TC74VHC541FT(EL)	MC74HC541N
TC74VHC573FT(EL)	TC74HC573F
TC74VHC574FT(EL)	TC74HC574P
TC74VHC595FT(EL)	TC74HC595P
TC74VHC74FT(EL)	TC74HC74P
TC74VHCT04AFT(EL)	TC74HC04P
TC74VHCT541AFT(EL)	MC74HC541N
TC7S04FU(TE85R)	TC7S04F
TC7S04FU-TE85R	TC7S04F
TC7S66FU	SC14S66F
TC7S66FU(TE85R)	SC14S66F
TC7SET02FU(TE85R)	TC4S01F
TC7SET08FU(TE85R)	TC7S08F
TC7SET32FU(TE85R)	TC7S32F
TC7SH00FU-TE85R	TC7S00F
TC7SH04FU	TC7S04F
TC7SH04FU-TE85R	TC7S04F
TC7SH08F-TE85R	TC7S08F
TC7SH08FU(TE85R)	TC7S08F
TC7SH08FU-TE85R	TC7S08F
TC7SH14FU-TE85R	TC7S14FU
TC7SH32FU(TE85R)	TC7S32F
TC7SH32FU-TE85R	TC7S32F
TC7SHU04FU-TE85R	TC7S04F
TC7W32FU	TC7W32FU
TC7W32FU(TE12R)	TC7W32FU
TC7W53FU(TE12R)	TC4W53FU
TC7W66FU(TE12R)	TC4W66F
TC7WH04FU(TE12R)	TC7W04F
TC7WH125FU(TE12R)	TC7W125FU
TC7WH157FU(TE12R)	TC7WH157FU_TE12R
TC7WH74FU(TE12R)	TC7W74FU
TC7WT125FU(TE12R)	TC7W125FU
TLC2932IPWR	TLC2932IPW
TMS320DA150GGU120	7-12
TSB43AB22	7-13
TSB43AB22APDT	TSB43AB22
TVP5145PFP	7-14
UPD61051GD-LML	7-15
XC2S150-5FG456C1	7-16
XC2S200-5FG456C1	7-16

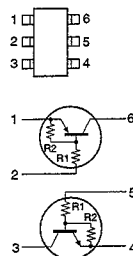
OTHERS

Page or ID No.

35-18	MR021-01
SPI-235-18	MR021-01
TLP814	MR010-09

RN4904(TE85R) R1=47K,R2=47K

—TOP VIEW—

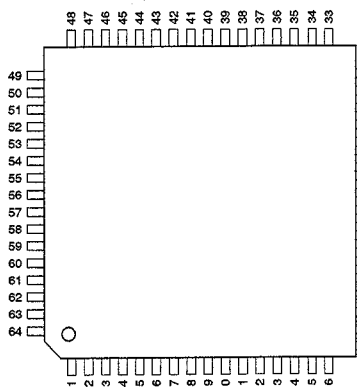


IC

ADV7300 (AD)
ADV7300AKST

VIDEO ENCODER

—TOP VIEW—



PIN NO.	I/O	SIGNAL	PIN NO.	I/O	SIGNAL	PIN NO.	I/O	SIGNAL	PIN NO.	I/O	SIGNAL
1	—	D.VCC	17	I	C3	33	I	RESET	49	I/O	S VSYNC
2	I	Y0	18	I	C4	34	I	EXT LF	50	I/O	S HSYNC
3	I	Y1	19	I	SPI/I2C	35	I	RSET2	51	I	S0
4	I	Y2	20	I/O	ALSB SO	36	O	COMP2	52	I	S1
5	I	Y3	21	I/O	SDA CLKSP	37	O	DAC F	53	I	S2
6	I	Y4	22	I	SCLK SI	38	O	DAC E	54	I	S3
7	I	Y5	23	I	P HSYNC	39	O	DAC D	55	I	S4
8	I	Y6	24	I	P VSYNC	40	—	A.GND	56	—	D.VCC
9	I	Y7	25	I	P BLANK	41	—	A.VCC	57	—	D.GND
10	—	D.VCC	26	I	C5	42	O	DAC C	58	I	S5
11	—	D.GND	27	I	C6	43	O	DAC B	59	I	S6
12	I	Y8	28	I	C7	44	O	DAC A	60	I	S7
13	I	Y9	29	I	C8	45	O	COMP1	61	I	S8
14	I	C0	30	I	C9	46	I/O	VREF	62	I	S9
15	I	C1	31	I	RTC SCR TR	47	I	RSET1	63	I	CLKIN B
16	I	C2	32	I	CLKIN A	48	I/O	S BLANK	64	—	D.GND

INPUTS

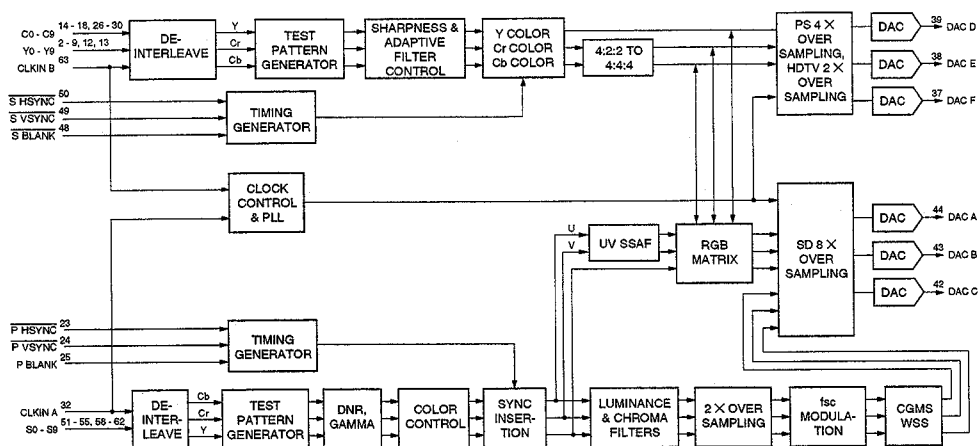
C0 - C9	: PROGRESSIVE SCAN/HD/TV INPUT PORT FOR Cr/Cb
CLKIN A	: PIXEL CLOCK FOR HD ONLY OR SD ONLY MODES
CLKIN B	: PIXEL CLOCK FOR PROGRESSIVE SCAN/HD/TV MODE
EXT LF	: EXTERNAL LOOP FILTER
I2C	: I2C PORT
P BLANK	: HD VIDEO BLANKING CONTROL
P HSYNC	: HD VIDEO HORIZONTAL SYNC CONTROL
P VSYNC	: HD VIDEO VERTICAL SYNC CONTROL
RESET	: RESET
RSET1, RSET2	: RESISTOR CONNECTION
RTC SCR TR	: REAL TIME CONTROL, TIMING RESET AND SUBCARRIER RESET
S0 - S9	: SD INPUT PORT OR PROGRESSIVE SCAN/HD/TV INPUT PORT FOR Cr
SCLK SI	: MPU PORT SERIAL INTERFACE CLOCK OR SPI INPUT
SPI	: SPI PORT
Y0 - Y9	: PROGRESSIVE SCAN/HD/TV INPUT PORT FOR Y

OUTPUTS

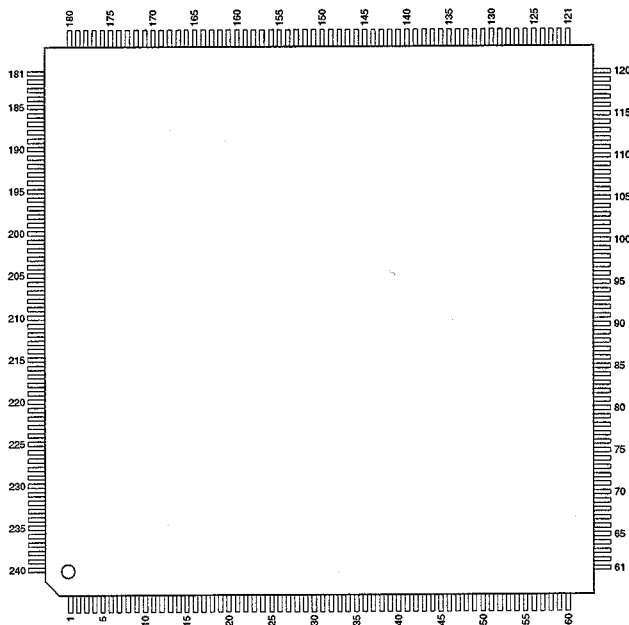
COMP1, COMP2	: COMPENSATION
DAC A	: CVBS/GREEN/Y
DAC B	: LUMINANCE/BLUE/U
DAC C	: CHROMA/RED/V
DAC D	: CVBS/GREEN/Y (SD ONLY MODE)
DAC E	: LUMINANCE/BLUE/U (SD ONLY MODE)
DAC F	: CHROMA/RED/V (SD ONLY MODE)
	: Y/GREEN (HD ONLY MODE AND SIMULTANEOUS HD/SD)
	: P/RED (HD ONLY MODE AND SIMULTANEOUS HD/SD)
	: Pb/BLUE (HD ONLY MODE AND SIMULTANEOUS HD/SD)

INPUTS/OUTPUTS

ALSB SO	: LSB OF THE MPU ADDRESS SET UP SIGNAL
S BLANK	: SD VIDEO BLANKING CONTROL
SDA CLKSP	: MPU PORT SERIAL DATA OR SPI CLOCK
S HSYNC	: SD VIDEO HORIZONTAL SYNC CONTROL
S VSYNC	: SD VIDEO VERTICAL SYNC CONTROL
VREF	: VOLTAGE REFERENCE



CXD1934Q (SONY)

MPEG AUDIO/VIDEO DECODER
-TOP VIEW-

INPUTS

ACLK	: DAC AUDIO SERIAL I/F CLOCK
CDBCKI	: CD SERIAL BIT CLOCK BYPASS
CDEMPI	: CD EMPHASIS
CDIN1I	: CD SERIAL BYPASS
CDIN2I	: CD S/P DATA INTERFACE BYPASS
CDLRKI	: CD SERIAL L/R CHANNEL CLOCK BYPASS
CLKI	: CLOCK
CRPCLKI	: DECRYPTION SYSTEM CLOCK
DT0I - DT7I	: DEMULTIPLEX DATA BYTE STREAM
DMACK0IN, DMACK1IN	: DMA ACKNOWLEDGE
HAD0I - HAD23I	: HOST ADDRESS BUS
HCPUMDI	: HOST CPU MODE SELECT
HCSN, HRWN	: HOST CHIP SELECT
ICLK	: DEMULTIPLEX DATA CLOCK
IERRIN	: DATA BYTE STREAM ERROR INDICATOR
IREFI	: DAC REFERENCE CURRENT
ISTARTIN	: INPUT PACKET START FLAG
IVALIN	: INPUT VALID INDICATOR
PDIO - PD17	: DIGITAL VIDEO PIXEL DATA
RSTN	: CHIP HARDWARE RESET
SCAN EN	: 0:TEST MODE, 1:NORMAL MODE
SCAN MODE	: 0:NORMAL MODE, 1:TEST MODE
SCLKIN	: SYSTEM CLOCK
SHTDWN	: INTERNAL RAM SHUTDOWN
TCK, TDI, TESTIN	: TEST
TMS, TRST	
VGO	: CAPACITOR CONNECTION
VREFI	: DAC REFERENCE VOLTAGE
X SCAN EN	: SCAN MODE ENABLE

OUTPUTS

ACH12O, ACH34O, ACH56O	: DAC AUDIO SERIAL OUTPUTS
BCKO	: AUDIO SERIAL I/F BIT CLOCK
BOUT	: BLUE OR V ANALOG VIDEO OUT
COMPOUT	: ANALOG COMPOSITE VIDEO
COUT	: ANALOG CHROMA
CPOT	: PLL SIGNAL
DICLKO	: DIGITAL VIDEO CLOCK
DMRQ0ON, DMRQ1ON	: DMA REQUEST
DO	: S/P DATA INTERFACE
DVOO - DVO7	: DIGITAL VIDEO
GOUT	: GREEN OR Y ANALOG VIDEO OUT
HIROON	: HOST CPU INTERRUPT REQUEST
HWAITON	: HOST WAIT
IREQON	: DATA BYTE STREAM REQUEST
LRCKO	: AUDIO SERIAL I/F L/R CHANNEL CLOCK
NRSDOUT	: SERIAL INTERFACE DATA
NRSEN	: SERIAL INTERFACE ENABLE FLAG
PD0O - PD07	: DIGITAL VIDEO PIXEL DATA
PWM	: PULSE WIDTH MODULATION
ROUT	: RED OR U ANALOG VIDEO OUT
SDAD0O - SDAD11O	: SDRAM ADDRESS
SDCASON	: SDRAM COLUMN ADDRESS STROBE
SDCKEO	: CLOCK VALID INDICATOR
SDCS0ON, SDCS1ON	: SDRAM CHIP SELECT
SDCLKO	: SDRAM CLOCK
SDDQM0O, SDDQM1O	: SDRAM MASK/ENABLE
SDRASON	: SDRAM ROW ADDRESS STROBE
SDWEON	: SDRAM WRITE ENABLE
TDO	: TEST
YOUT	: ANALOG Y

INPUTS/OUTPUTS

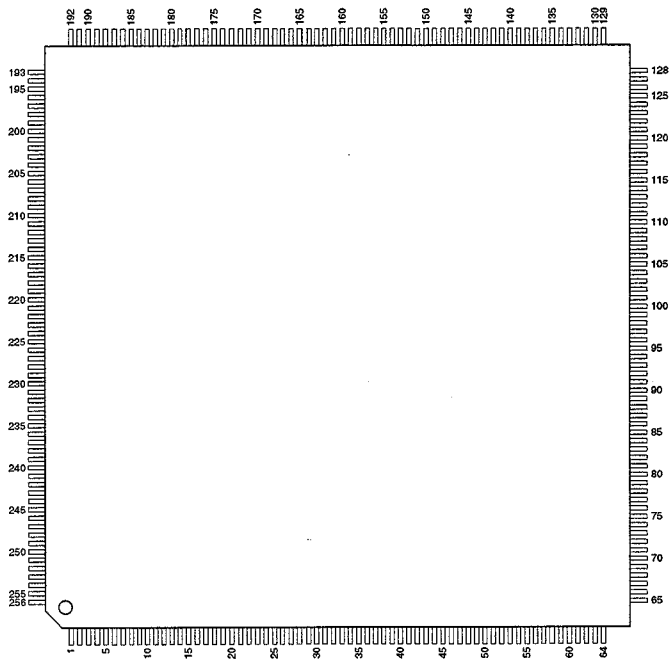
FLDO	: FIELD
HDATA0 - HDATA7	: HOST BUS DATA
HD8 - HD15	: HOST BUS DATA
HSYNCON	: HORIZONTAL SYNC
SDDQ0 - SDDQ15	: SDRAM DATA BUS

PIN NO.	I/O	SIGNAL	PIN NO.	I/O	SIGNAL	PIN NO.	I/O	SIGNAL	PIN NO.	I/O	SIGNAL
1	—	D.Vcc	61	—	A.GND	121	I	TMS	181	—	A.Vcc
2	VO	HD8	62	—	A.GND	122	I	TRST	182	I	SCLKIN
3	VO	HD9	63	O	ROUT	123	—	D.GND	183	—	A.GND
4	VO	HD10	64	—	A.Vcc	124	O	SDAD4O	184	—	NC
5	VO	HD11	65	—	A.GND	125	O	SDAD3O	185	—	NC
6	—	D.GND	66	O	BOUT	126	—	D.Vcc	186	O	CPOT
7	VO	HD12	67	—	A.Vcc	127	O	SDAD5O	187	—	NC
8	VO	HD13	68	—	A.GND	128	O	SDAD2O	188	I	SCAN EN
9	VO	HD14	69	O	GOUT	129	—	D.GND	189	—	D.Vcc
10	VO	HD15	70	—	A.Vcc	130	O	SDAD6O	190	I	HAD23I
11	—	D.Vcc	71	—	D.GND	131	O	SDAD1O	191	I	HAD22I
12	I	ACLK	72	—	D.Vcc	132	—	D.Vcc	192	I	HAD21I
13	—	D.GND	73	—	A.GND	133	O	SDAD7O	193	I	HAD20I
14	O	ACH12O	74	O	YOUT	134	O	SDAD0O	194	—	D.GND
15	O	ACH34O	75	—	A.Vcc	135	—	D.Vcc	195	I	HAD19I
16	O	ACH56O	76	—	A.GND	136	O	SDAD8O	196	I	HAD18I
17	—	D.GND	77	O	COUT	137	O	SDAD10O	197	I	HAD17I
18	O	LRCKO	78	—	A.Vcc	138	—	D.GND	198	I	HAD16I
19	O	BCKO	79	—	A.GND	139	O	SDAD9O	199	—	D.GND
20	O	DO	80	O	COMPOUT	140	O	SDAD11O	200	I	HAD15I
21	—	D.Vcc	81	—	A.Vcc	141	—	D.GND	201	I	HAD14I
22	I	CDIN2I	82	I	VGO	142	I	SCAN MODE	202	I	HAD13I
23	I	CDIN1I	83	—	D.Vcc	143	O	SDCS1ON	203	I	HAD12I
24	—	D.Vcc	84	I	VREFI	144	O	SDCS0ON	204	—	D.Vcc
25	I	CDBCKI	85	I	IREFI	145	—	D.Vcc	205	I	HAD11I
26	I	CDLRKI	86	—	D.Vcc	146	O	SDCKEO	206	I	HAD10I
27	I	CDEMPI	87	I/O	FLDO	147	O	SDRASON	207	I	HAD9I
28	—	D.GND	88	I/O	HSYNCON	148	—	D.GND	208	I	HAD8I
29	I	CRPCLKI	89	—	D.GND	149	O	SDCLKO	209	—	D.Vcc
30	—	D.GND	90	—	DSPACK0	150	—	D.Vcc	210	I	HAD7I
31	I	DT0I	91	—	DSPACK1	151	O	SDCASON	211	I	HAD6I
32	I	DT1I	92	I	PD17	152	O	SDWEON	212	I	HAD5I
33	I	DT2I	93	I	PD16	153	—	D.Vcc	213	I	HAD4I
34	I	DT3I	94	I	PD15	154	O	SDDQM1O	214	—	D.GND
35	—	D.Vcc	95	I	PD14	155	O	SDDQM0O	215	I	HAD3I
36	I	DT4I	96	—	D.Vcc	156	—	D.GND	216	I	HAD2I
37	I	DT5I	97	I	PD13	157	I/O	SDDQ8	217	I	HAD1I
38	I	DT6I	98	I	PD12	158	I/O	SDDQ7	218	I	HAD0I
39	I	DT7I	99	I	PD11	159	I/O	SDDQ6	219	—	D.GND
40	—	D.Vcc	100	I	PD10	160	I/O	SDDQ5	220	I	HCSN
41	I	ICLK	101	—	D.GND	161	—	D.Vcc	221	I	HRWN
42	—	D.GND	102	O	PD09	162	I/O	SDDQ10	222	I	HCPUMDI
43	I	IERRIN	103	O	PD01	163	I/O	SDDQ5	223	O	HIROON
44	I	ISTARTIN	104	O	PD02	164	I/O	SDDQ11	224	O	HWAITON
45	I	IVALIN	105	O	PD03	165	I/O	SDDQ4	225	—	D.Vcc
46	O	IREQON	106	—	D.Vcc	166	—	D.GND	226	I	DMACK1IN
47	O	PWM	107	O	PD04	167	I/O	SDDQ12	227	O	DMRQ1ON
48	—	D.GND	108	O	PD05	168	I/O	SDDQ3	228	I	DMACK0IN
49	—	D.Vcc	109	O	PD06	169	—	D.GND	229	O	DMRQ0ON
50	O	DVOO	110	O	PD07	170	I/O	SDDQ13	230	—	D.Vcc
51	O	DVO1	111	—	D.GND	171	I/O	SDDQ2	231	I	RSTN
52	O	DVO2	112	O	NRSDOUT	172	—	D.Vcc	232	I/O	HDATA0
53	O	DVO3	113	O	NRSEN	173	I/O	SDDQ14	233	I/O	HDATA1
54	—	D.Vcc	114	I	SHTDWN	174	I/O	SDDQ1	234	I/O	HDATA2
55	O	DVO4	115	—	D.GND	175	—	D.GND	235	I/O	HDATA3
56	O	DVO5	116	—	D.Vcc	176	I/O	SDDQ15	236	—	D.GND
57	O	DVO6	117	I	X SCAN EN	177	I/O	SDDQ0	237	I/O	HDATA4
58	O	DVO7	118	I	TDI	178	—	D.GND	238	I/O	HDATA5
59	—	D.GND	119	O	TDO	179	I	TESTIN	239	I/O	HDATA6
60	O	DICLKO	120	I	TCK	180	I	CLKI	240	VO	HDATA7

HD6417751F167 (HITACHI)

32-BIT RISC MICROPROCESSOR

—TOP VIEW—



PIN NO.	I/O	SIGNAL	PIN NO.	I/O	SIGNAL	PIN NO.	I/O	SIGNAL	PIN NO.	I/O	SIGNAL	PIN NO.	I/O	SIGNAL
1	I	TMS	53	O	A2	105	—	VccQ	157	—	VccQ	209	—	Vcc
2	I	TCK	54	O	A3	106	—	GNDQ	158	—	GNDQ	210	—	GND
3	—	VccQ	55	—	VccQ	107	O	A24	159	I/O	PCISTOP	211	I	MD2/RXD2
4	—	GNDQ	56	—	GNDQ	108	O	A25	160	I/O	PCICLOCK	212	I	RXD
5	I	TDI	57	O	A4	109	O	WE2/CIOWR	161	I/O	PERR	213	I/O	TCLK
6	O	CS0	58	O	A5	110	O	WE3/CIOWR	162	I/O	PAR	214	I/O	MD8/RTS2
7	O	CS1	59	O	A6	111	—	Vcc	163	I/O	C/BE1	215	I/O	SK
8	O	CS4	60	O	A7	112	—	GND	164	I/O	AD15	216	I/O	MD1/TXD2
9	O	CS5	61	O	A8	113	I	SLEEP	165	I/O	AD14	217	I/O	MD9/SCK2
10	O	CS6	62	O	A9	114	O	PCIGNT4	166	I/O	AD13	218	I/O	MD7/CTS2
11	O	BS	63	O	A10	115	O	PCIGNT3	167	I/O	AD12	219	—	AUDSYN
12	O	WE0/REG	64	O	A11	116	O	PCIGNT2	168	I/O	AD11	220	—	AUDCK
13	O	WE1	65	O	A12	117	I	PCIREQ4	169	—	VccQ	221	—	VccQ
14	I/O	D0	66	O	A13	118	I	PCIREQ3/MD10	170	—	GNDQ	222	—	GNDQ
15	—	VccQ	67	—	VccQ	119	—	VccQ	171	I/O	AD10	223	—	AUDATA0
16	—	GNDQ	68	—	GNDQ	120	—	GNDQ	172	I/O	AD9	224	—	AUDATA1
17	—	Vcc	69	O	A14	121	I	PCIREQ2/MD9	173	I/O	AD8	225	—	Vcc
18	—	GND	70	O	A15	122	I	IDSEL	174	I/O	C/BE0	226	—	GND
19	I/O	D1	71	O	A16	123	O	INTA	175	—	Vcc	227	—	AUDATA2
20	I/O	D2	72	O	A17	124	O	PCIRST	176	—	GND	228	—	AUDATA3
21	I/O	D3	73	O	CAS2/DM2	125	I	PCICLK	177	I/O	AD7	229	—	RESERVED
22	I/O	D4	74	O	CAS3/DM3	126	O	PCIGNT1/REGOUT	178	I/O	AD6	230	I/O	MD3/CE2A
23	I/O	D5	75	I/O	D16	127	I	PCIREQ1/GNTIN	179	I/O	AD5	231	I/O	MD4/CE2B
24	I/O	D6	76	I/O	D17	128	I/O	SERR	180	I/O	AD4	232	I	MD5
25	I/O	D7	77	I/O	D18	129	I/O	AD31	181	I/O	AD3	233	—	VccQ
26	I/O	D8	78	I/O	D19	130	I/O	AD30	182	I/O	AD2	234	—	GNDQ
27	I/O	D9	79	—	VccQ	131	—	VccQ	183	—	VccQ	235	O	DACK0
28	I/O	D10	80	—	GNDQ	132	—	GNDQ	184	—	GNDQ	236	O	DACK1
29	—	VccQ	81	—	Vcc	133	I/O	AD29	185	I/O	AD1	237	O	DRAK0
30	—	GNDQ	82	—	GND	134	I/O	AD28	186	I/O	AD0	238	O	DRAK1
31	I/O	D11	83	I/O	D20	135	I/O	AD27	187	I	IRL0	239	—	Vcc
32	I/O	D12	84	I/O	D21	136	I/O	AD26	188	I	IRL1	240	—	GND
33	I/O	D13	85	I/O	D22	137	I/O	AD25	189	I	IRL2	241	O	STATUS9
34	I/O	D14	86	I/O	D23	138	I/O	AD24	190	I	IRL3	242	O	STATUS1
35	I/O	D15	87	I/O	D24	139	I/O	C/BE3	191	—	VccQ	243	I	DREQ0
36	O	CAS0/DM0	88	I/O	D25	140	I/O	AD23	192	—	GNDQ	244	I	DREQ1
37	O	CAS1/DM1	89	I/O	D26	141	I/O	AD22	193	O	XTAL2	245	I/O	ASEBRK/BRKACK
38	O	RD/WR	90	I/O	D27	142	I/O	AD21	194	I	XTAL2	246	O	TD0
39	O	CKIO	91	I/O	D28	143	—	VccQ	195	—	Vcc RTC	247	—	VccQ
40	—	RESERVED	92	I/O	D29	144	—	GNDQ	196	—	GND RTC	248	—	GNDQ
41	—	RESERVED	93	—	VccQ	145	—	Vcc	197	I	CA	249	—	Vcc PLL2
42	—	GNDQ	94	—	GNDQ	146	—	GND	198	I	RESET	250	—	GND PLL2
43	—	RESERVED	95	I/O	D30	147	I/O	AD20	199	I	TRST	251	—	Vcc PLL1
44	O	RD/CAS/FRAME	96	I/O	D31	148	I/O	AD19	200	I	MRESET	252	—	GND PLL1
45	O	CKE	97	—	Vcc	149	I/O	AD18	201	I	NMI	253	—	Vcc CPG
46	O	RAS	98	—	GND	150	I/O	AD17	202	O	BACK/BSREQ	254	—	GND CPG
47	—	Vcc	99	O	A18	151	I/O	AD16	203	I	BREQ/BSACK	255	O	XTAL
48	—	GND	100	O	A19	152	I/O	C/BE2	204	I	MD6/IOIS16	256	I	EXTAL
49	O	CS2	101	O	A20	153	I/O	PCIFRAME	205	I	RDY			
50	O	CS3	102	O	A21	154	I/O	IRDY	206	O	TXD			
51	O	A0	103	O	A22	155	I/O	TRDY	207	—	VccQ			
52	O	A1	104	O	A23	156	I/O	DEVSEL	208	—	GNDQ			

INPUTS

BREQ	: BUS REQUEST
BSACK	: BUS ACKNOWLEDGE
CA	: HARDWARE STANDBY
DREQ0, DREQ1	: REQUEST FROM DMAC0, DAMC1
EXTAL	: EXTERNAL CLOCK/CRYSTAL OSCILLATOR
EXTAL2	: RTC CRYSTAL OSCILLATOR
GNTIN	: BUS GRANT
IDSEL	: CONFIGURATION DEVICE SELECT
IOIS16	: INPUT/OUTPUT 16-BIT COMMAND
IRL0 - IRL3	: INTERRUPT
MD2, MD5, MD6, MD9, MD10	: MODE
MRESET	: MANUAL RESET
NMI	: NONMASKABLE INTERRUPT
PCICLK	: PCI CLOCK
PCIREQ1 - PCIREQ4	: BUS REQUEST
RDY	: BUS READY
RESET, TRST	: RESET
RXD	: SCI DATA
RXD2	: SCIF DATA
SLEEP	: SLEEP
TCK	: CLOCK
TDI	: DATA
TMS	: MODE

OUTPUTS

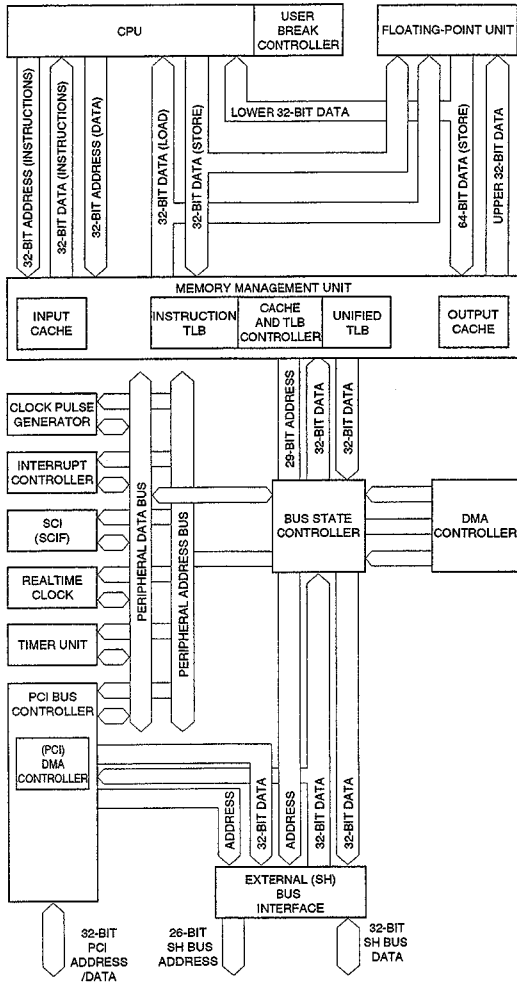
A0 - A25	: ADDRESS
BACK	: BUS ACKNOWLEDGE
BS	: BUS START
BREQ	: BUS REQUEST
CAS0, CAS6 - CAS5	: COLUMN ADDRESS STROBE
CKE	: CLOCK OUTPUT ENABLE
CKIO	: CLOCK
CS0 - CS6	: CHIP SELECT
DACK0, DACK1	: DMA BUS ACKNOWLEDGE
DM0 - DM3	: DATA MASK
DRAK0, DRAK1	: DMA REQUEST ACKNOWLEDGE
FRAME	: FRAME
IOIOR	: PCMCIA I/O READ
IOIOWR	: PCMCIA I/O WRITE
INTA	: INTERRUPT
MD0, MD1, MD3, MD4	: MODE
MD7, MD8	: MODE
PCIGNT1 - PCIGNT4	: BUS GRANT
PCIRST	: RESET
RAS	: ROW ADDRESS STROBE
RD, RD	: READ
REG	: DATA SELECT SIGNAL
REQOUT	: BUS REQUEST
STATUS0, STATUS1	: STATUS
TD0	: DATA
TXD	: SCI DATA
WE0 - WE3	: WRITE ENABLE
WR	: WRITE
XTAL	: CRYSTAL OSCILLATOR
XTAL2	: RCT CRYSTAL OSCILLATOR

INPUTS/OUTPUTS

AD1 - AD31	: PCI ADDRESS/DATA PORT
ASEBRK	: ASE BREAK
BEO - BE3	: BYTE ENABLE
BRKACK	: BREAK ACKNOWLEDGE
C	: COMMAND
CE2A, CE2B	: PCMCIA CHIP ENABLE
CTS2, RTS2	: SCIF DATA CONTROL
D0 - D31	: DATA
DEVSEL	: DEVICE SELECT
IRDY	: INITIATOR READY
PAR	: PARITY
PCIFRAME	: BUS CYCLE
PCICLOCK	: EXCLUSIVE ACCESS CONTROL
PCISTOP	: TRANSACTION STOP
PERR	: PARITY ERROR
SCK, SCK2	: SCIF CLOCK
SERR	: SYSTEM ERROR
TCLK	: RTC/TMU CLOCK
TRDY	: TARGET READY
TXD2	: SCIF DATA

OTHERS

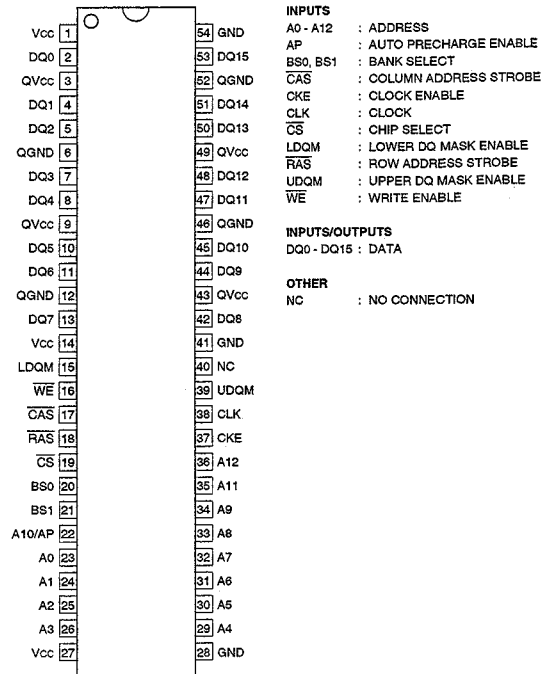
AUDATA0 - AUDATA3	: AUD DATA
AUDCK	: AUD CLOCK
AUDSYN	: AUD SYN



SCI : SERIAL COMMUNICATION INTERFACE
 SCIF : SERIAL COMMUNICATION INTERFACE WITH FIFO
 TLB : TRANSLATION LOOKASIDE BUFFER

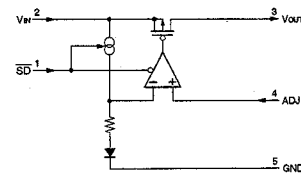
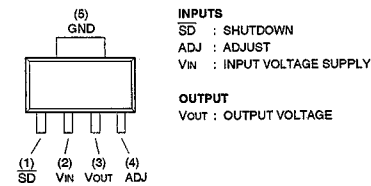
HY57V561620BT-HDR (HYNIX)

256M (4194304 x 16 x 4) -BIT SDRAM
 —TOP VIEW—



LP3964EMPX-ADJ (NS)

LOW DROPOUT REGULATOR
 —TOP VIEW—



M1543C-B1 (ALI)

PCI to ISA BUS BRIDGE

—BOTTOM VIEW—

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
A	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
B	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
C	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
D	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
E	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
F	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
G	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
H	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
J	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
K	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
L	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
M	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
N	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
P	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
R	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
T	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
U	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
V	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
W	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
Y	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○

PIN NO.	I/O	SIGNAL	PIN NO.	I/O	SIGNAL	PIN NO.	I/O	SIGNAL	PIN NO.	I/O	SIGNAL
A1	I/O	AD21	C3	I/O	AD24	E5	I/O	INTBJS0	H1	I/O	PIDED14
A2	I/O	AD20	C4	I/O	AD18	E6	I/O	INTCJS1	H2	I/O	PIDED1
A3	I/O	AD19	C5	I/O	CBEJ2	E7	O	PCIRSTJ	H3	I/O	PIDED13
A4	I/O	AD16	C6	I/O	DEVSELJ	E8	I	PCICLK	H4	I/O	PIDED2
A5	I/O	IRDYJ	C7	I/O	CBEJ1	E9	I/O	AD9	H5	I/O	PIDED12
A6	I	SERRJ	C8	I/O	AD12	E10	I/O	AD5	H15	—	VBAT
A7	I/O	AD14	C9	I/O	CBEJ0	E11	I/O	AD0	H16	I/O	LA19
A8	I/O	AD10	C10	I/O	AD3	E12	I/O	USBP1+	H17	I/O	IRQ15
A9	I/O	AD6	C11	O	PCISTPJ	E13	I	SIRQI	H18	O	SMIJ
A10	I/O	AD1	C12	I	OVCRJ	E14	O	BIOSA16	H19	O	NMI
A11	O	PHOLDJ	C13	I/O	USBP0—	E15	O	SQWO	H20	O	INTR
A12	I	PCIREQJ	C14	O	RTCAS	E16	I	THRMJ	J1	I/O	PIDED3
A13	I/O	USBP1—	C15	I/O	XD1	E17	O	SPLD	J2	I/O	PIDED11
A14	O	RTCD5	C16	I/O	XD4	E18	I	DREQ5	J3	I/O	PIDED4
A15	O	ROMKBCSJ	C17	I/O	XD7	E19	I/O	MEMWJ	J4	I/O	PIDED10
A16	I/O	XD2	C18	O	DACKJ7	E20	O	DACKJ5	J5	I/O	PIDED5
A17	I/O	XD5	C19	I/O	SD10	F1	O	PIDEA0	J9	—	GND
A18	I/O	SD15	C20	I	DREQ6	F2	O	PIDEA1	J10	—	GND
A19	I/O	SD14	D1	I/O	AD29	F3	O	PIDEAKJ	J11	—	GND
A20	I/O	SD13	D2	I/O	AD28	F4	I/O	INTDJS2	J12	—	GND
B1	I/O	CBEJ3	D3	I/O	AD27	F5	I	PIDERDY	J16	I/O	LA20
B2	I/O	AD23	D4	I/O	AD30	F6	—	Vcc B	J17	O	SLEEPJ
B3	I/O	AD22	D5	I/O	AD31	F7	—	Vcc 3A	J18	O	STPCLKJ
B4	I/O	AD17	D6	I/O	TRDYJ	F14	—	Vcc A	J19	O	IGNNEJ
B5	I/O	FRAMEJ	D7	I/O	PAR	F15	—	Vcc E	J20	O	CPURST
B6	I/O	STOPJ	D8	I/O	AD13	F16	I/O	KBINH	K1	I/O	PIDED9
B7	I/O	AD15	D9	I/O	AD8	F17	I/O	MEMRJ	K2	I/O	PIDED6
B8	I/O	AD11	D10	I/O	AD4	F18	I	DREQ0	K3	I/O	PIDED8
B9	I/O	AD7	D11	O	CPUSTPJ	F19	I/O	LA17	K4	I/O	PIDED7
B10	I/O	AD2	D12	I	SIRQJ	F20	O	DACKJ0	K5	O	SIDEC3J
B11	I	PHLDAJ	D13	O	BIOSA17	G1	O	PIDEIORJ	K9	—	GND
B12	I	USBCLK	D14	I/O	XDIR	G2	O	PIDEIORJ	K10	—	GND
B13	I/O	USBP0+	D15	I/O	PCSJ	G3	I	PIDEDRQ	K11	—	GND
B14	O	RTCRW	D16	I/O	SERRQ	G4	I/O	PIDED15	K12	—	GND
B15	I/O	XD0	D17	O	SPKR	G5	I/O	PIDED0	K16	O	ZZ
B16	I/O	XD3	D18	I/O	SD9	G6	—	Vcc A	K17	O	OFF PWR1
B17	I/O	XD6	D19	O	DACKJ6	G15	—	Vcc 3C	K18	I	RSMRSTJ
B18	I/O	SD12	D20	I/O	SD8	G16	I/O	LA18	K19	O	SUSTAT1J
B19	I	DREQ7	E1	O	PIDEC3J	G17	I/O	IRQ14	K20	I	ACPWR
B20	I/O	SD11	E2	O	PIDEC1J	G18	O	INIT	L1	O	SIDEC1J
C1	I/O	AD26	E3	O	PIDEA2	G19	O	A20MJ	L2	O	SIDEA2
C2	I/O	AD25	E4	I	INTAJMI	G20	I	FERRJ	L3	O	SIDEA0

PIN NO.	I/O	SIGNAL	PIN NO.	I/O	SIGNAL	PIN NO.	I/O	SIGNAL	PIN NO.	I/O	SIGNAL
L4	O	SIDEA1	P15	—	Vcc C	U3	I	RDATAJ	W5	I	CTS1J
L5	O	SIDEAKJ	P16	I/O	LA23	U4	I	INDEXJ	W6	I/O	SOUT1
L9	—	GND	P17	I	IO16J	U5	I	DCD2J	W7	I/O	PD1
L10	—	GND	P18	I/O	SBHEJ	U6	I	DSR1J	W8	I/O	PD6
L11	—	GND	P19	I/O	M16J	U7	O	STROBJ	W9	I	SLCT
L12	—	GND	P20	I	OSC14M	U8	I/O	PD4	W10	O	SLCTINJ
L16	I/O	SMBDATA	R1	I/O	SIDED10	U9	I	BUSY	W11	I/O	SD6
L17	O	OFF PWR2	R2	I/O	SIDED5	U10	I	ERRORJ	W12	I/O	SD4
L18	I	DOCKJ	R3	I/O	SIDED9	U11	I/O	KBCLK	W13	I/O	SD2
L19	I	IRQ8J	R4	O	MOT1J	U12	I/O	KBDATA	W14	O	SMEMWJ
L20	I	PWRBNTJ	R5	O	DRV0J	U13	I/O	SD1	W15	I/O	SA18
M1	I	SIDERDY	R6	—	Vcc 5	U14	O	SMEMRJ	W16	I	DREQ3
M2	O	SIDEIORJ	R7	—	Vcc A	U15	I/O	SA17	W17	I/O	SA14
M3	O	SIDEIORJ	R14	—	Vcc 3A	U16	I/O	IRQ3	W18	O	SYSCLK
M4	I	SIDERQJ	R15	—	Vcc A	U17	I/O	IRQ5	W19	I/O	SA11
M5	I/O	SIDED15	R16	O	BALE	U18	I/O	SA8	W20	I/O	IRQ7
M9	—	GND	R17	O	TC	U19	I/O	SA7	Y1	I	RI2J
M10	—	GND	R18	I/O	SA0	U20	I/O	IRQ4	Y2	I	CTS2J
M11	—	GND	R19	I/O	SA1	V1	I	WPROTJ	Y3	I	DSR2J
M12	—	GND	R20	I/O	SA2	V2	I	TRK0J	Y4	I	SIN2
M16	I/O	SMBCLK	T1	I/O	SIDED6	V3	O	WGATEJ	Y5	O	RTS1J
M17	I/O	LA21	T2	I/O	SIDED8	V4	O	DTR2J	Y6	I	SIN1
M18	I	RI	T3	I/O	DSKCHGJ	V5	I	RI1J	Y7	I/O	PD2
M19	I/O	CLK32KO	T4	O	DRV1J	V6	O	DTR1J	Y8	I/O	PD7
M20	I	PWG	T5	O	MOT0J	V7	I/O	PD0	Y9	O	AUTOFDJ
N1	I/O	SIDED0	T6	O	DENSEL	V8	I/O	PD5	Y10	I	IOCHKJ
N2	I/O	SIDED14	T7	I	DCD1J	V9	I	PE	Y11	I/O	SD7
N3	I/O	SIDED1	T8	I/O	PD3	V10	O	INTJ	Y12	I/O	SD5
N4	I/O	SIDED13	T9	I	ACKJ	V11	I/O	IRQ9	Y13	I/O	SD3
N5	I/O	SIDED2	T10	O	RSTDRV	V12	I	DREQ2	Y14	I/O	IOCHRDY
N15	—	Vcc 5S	T11	O	MSCLK	V13	I	NOWSJ	Y15	I/O	IOWJ
N16	I/O	IRQ11	T12	I/O	MSDATA	V14	O	AEN	Y16	I/O	SA16
N17	I/O	LA22	T13	I/O	SD0	V15	I/O	IORJ	Y17	O	DACKJ1
N18	I/O	IRQ10	T14	I/O	SA19	V16	I/O	SA15	Y18	I/O	SA13
N19	I	OSC32KII	T15	O	DACKJ3	V17	I	DREQ1	Y19	O	REFRSHJ
N20	I	OSC32KI	T16	O	DACKJ2	V18	I/O	SA10	Y20	I/O	SA12
P1	I/O	SIDED12	T17	I/O	SA6	V19	I/O	IRQ6			
P2	I/O	SIDED3	T18	I/O	SA3	V20	I/O	SA9			
P3	I/O	SIDED11	T19	I/O	SA4	W1	O	WDATAJ			
P4	I/O	SIDED4	T20	I/O	SA5	W2	O	STEPJ			
P5	O	DIRJ	U1	I/O	SIDED7	W3	O	RTS2J			
P6	—	Vcc A	U2	O	HDSSELJ	W4	O	SOUT2			

INPUTS

ACKJ	: ACKNOWLEDGE
ACPIWR	: BABY AT OR ATX HARDWARE CONFIGURES INPUT
BUSY	: BUSY
CTS1J, CTS2J	: CLEAR TO SEND
DOD1J, DOD2J	: DATA CARRIER DETECT
DOCKJ	: DOCKING INSERT EVENT INPUT OR GENERAL PURPOSE INPUT OR SLEEP BUTTON INPUT OR PCI POWER MANAGEMENT EVENT
DREQ0 - DREQ7	: DMA REQUEST SIGNALS
DSKCHGJ	: DISK CHANGE
DSR1J, DSR2J	: DATA SET READY
ERRORJ	: ERROR
FERRJ	: FLOATING POINT ERROR
INDEXJ	: INDEX
INTAJ MI	: PCI INT A
IO16J	: ISA 16 BIT I/O DEVICE INDICATOR
IOCHKJ	: ISA PARITY ERROR
IRQ8J	: RTC INTERRUPT INPUT
NOWSJ	: ISA ZERO WAIT-STATE FOR INPUT
OSC14M	: 14.318 MHz CLOCK INPUT
OSC32KJ, OSC32KII	: 32 KHz OSCILLATOR INPUTS
OVCRJ	: OVER CURRENT DETECT INPUT
PCICLK	: PCI CLOCK FOR INTERNAL PCI INTERFACE
PCIREQJ	: PCI BUS REQUEST EVENT INPUT
PE	: PAPER END
PHLDAJ	: PCI BUS OWNERSHIP ACKNOWLEDGE
PIDEDQJ	: PRIMARY IDE DMA REQUEST FOR IDE MASTER
PIDERDY	: PRIMARY IDE READY
PWG	: POWER-GOOD INPUT
PWRBTNJ	: POWER BUTTON INPUT
RDATAJ	: READ DATA
RI	: RING-IN
RI1J, RI2J	: RING INDICATOR
RSMRSTJ	: RESUME CIRCUIT INITIAL RESET INPUT
SERRJ	: SYSTEM ERROR
SIDEDQJ	: SECONDARY IDE DMA REQUEST FOR IDE MASTER
SIDERDY	: SECONDARY IDE READY
SIN1, SIN2	: RECEIVE DATA
SIRQI, SIRQII	: STEERABLE IRQ INPUT
SLCT	: PRINTER SELECTED STATUS
THRMJ	: THERMAL EVENT INPUT OR GENERAL PURPOSE INPUT
TRK0J	: TRACK 0
USBCLK	: 48 MHz USB CLOCK INPUT
WPROTJ	: WRITE PROTECT

OUTPUTS

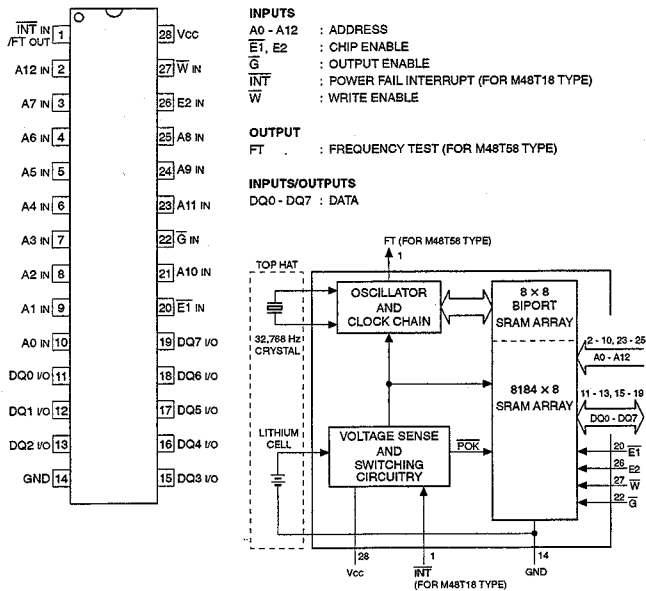
A20MJ	: CPU A20 MASK
AEN	: ISA I/O ADDRESS ENABLE
AUTOFDJ	: AUTOFEED OUTPUT
BALE	: BUS ADDRESS LATCH ENABLE
BIOSA16, BIOSA17	: ROM ADDRESS
CPU_STPJ	: CLOCK CELL CPU CLOCK STOP
CPURST	: CPU COLD RESET
DACKJ0 - DACKJ7	: DMA ACKNOWLEDGE SIGNALS
DENSEL	: DENSITY SELECT
DIFJ	: DIRECTION
DRV0J, DRV1J	: DRIVE SELECT
DTR1J, DTR2J	: DATA TERMINAL READY
HDSELJ	: HEAD SELECT
IGNNEJ	: IGNORE ERROR
INIT	: CPU INITIALISE INTERRUPT
INITJ	: INITIATE OUTPUT
INTR	: INTERRUPT REQUEST TO CPU
MOT0J, MOT1J	: MOTOR ON
MSCLK	: MOUSE CLOCK
MSDATA	: MOUSE DATA
NMI	: NON-MASKABLE INTERRUPT TO CPU
OFF PWR1	: REMOVE ALL CIRCUIT POWER EXCEPT INTERNAL SUSPEND CIRCUIT AND EXTERNAL DRAM
OFF PWR2	: REMOVE ALL CIRCUIT POWER EXCEPT INTERNAL SUSPEND CIRCUIT
PCI STPJ	: CLOCK CELL PCI CLOCK STOP
PCIRSTJ	: PCI BUS RESET
PIDEA0 - PIDEA2	: PRIMARY IDE ATA ADDRESS BUS
PIDECS1J, PIDECS3J	: IDE CHIP SELECT FOR PRIMARY CHANNEL
PIDEDAKJ	: PRIMARY IDE DACKJ FOR IDE MASTER
PIDEIORJ	: PRIMARY IDE IORJ COMMAND
PIDEIOWJ	: PRIMARY IDE IOWJ COMMAND
ROMKBSCJ	: ROM/KEYBOARD CHIP SELECT
RSTDRV	: ISA BUS RESET
RTCAS	: RTC ADDRESS STROBE
RTCDJ	: RTC DATA STROBE
RTCRW	: RTC WRITE STROBE
RTS1J, RTS2J	: REQUEST TO SEND
SIDEA0 - SIDEA2	: SECONDARY IDE ATA ADDRESS BUS
SIDEC1J, SIDEC3J	: IDE CHIP SELECT FOR SECONDARY CHANNEL
SIDEDAKJ	: SECONDARY IDE DACKJ FOR IDE MASTER
SIDEIORJ	: SECONDARY IDE IORJ COMMAND
SIDEIOWJ	: SECONDARY IDE IOWJ COMMAND
SLCTINJ	: PRINTER SELECT INPUT
SLEEPJ	: PENTIUM II SLEEP STATE
SMEMRJ	: ISA SYSTEM MEMORY READ
SMEMWJ	: ISA SYSTEM MEMORY WRITE
SMIJ	: SMM INTERRUPT OUTPUT
SOUT1, SOUT2	: TRANSMIT DATA
SQWO	: SQUARE WAVE OUTPUT OR EXTENDED GPIO WRITE
STEPJ	: STEP
STPCLKJ	: STOP CPU INTERNAL CLOCK OUTPUT
STROBJ	: STROBE OUTPUT
SUSTAT1J	: SUSPEND STATUS FOR NORTH BRIDGE
SYSCLK	: ISA SYSTEM CLOCK
WDATAJ	: WRITE DATA
WGATEJ	: WRITE GATE
ZZ	: PBRAM POWER SAVING MODE

INPUTS/OUTPUTS

AD0 - AD31	: ADDRESS AND DATA MULTIPLEXED BUS
CBEJ0 - CBEJ3	: BUS COMMAND AND BYTE ENABLE
CLK32KO	: 32 KHz CLOCK OUTPUT FOR DRAM REFRESH
DEVSELJ	: DEVICE SELECT
FRAMEJ	: CYCLE FRAME
INTBJ0, INTCJ1	: PCI INT B, PCI INT C, PCI INT D
INTDJ2	
IOCHRDY	: ISA SYSTEM READY
IORJ	: ISA I/O READ
IOWJ	: ISA I/O WRITE
IRDYJ	: INITIATOR REQUEST
IRQ3 - IRQ15	: INTERRUPT REQUEST
KBCLK	: KEYBOARD CLOCK
KBDATA	: INTERRUPT REQUEST LINE 10 OR KEYBOARD DATA
KBINH	: KEYBOARD INHIBIT
LA17 - LA23	: ISA LATCHED ADDRESS BUS
M16J	: ISA 16 BIT MEMORY DEVICE INDICATOR
MEMRJ	: ISA MEMORY READ
MEMWJ	: ISA MEMORY WRITE
PAR	: PARITY SIGNAL
PCSJ	: PROGRAMMABLE CHIP SELECT OR APIC CHIP SELECT
PD0 - PD7	: PORT DATA
PHOLDJ	: PCI BUS OWNERSHIP REQUEST
PIDED0 - PIDE15	: PRIMARY IDE ATA DATA BUS
REFRSHJ	: ISA REFRESH CYCLE
SA0 - SA19	: ISA SLOT ADDRESS BUS
SBHEJ	: ISA BYTE HIGH ENABLE
SD0 - SD15	: ISA LOW BYTE SLOT DATA
SERIRQ	: SERIAL INTERRUPT REQUEST
SIDED0 - SIDED15	: SECONDARY IDE ATA DATA BUS
SMBCLK	: SM BUS CLOCK
SMBDATA	: SM BUS DATA LINE
SPKR	: SPEAKER OUTPUT
SPLED	: SPEED LED OUTPUT
STOPJ	: CYCLE STOP REQUEST
TC	: DMA END OF PROCESS
TRDYJ	: TARGET READY
USBP0-, USBP0+	: UNIVERSAL SERIAL BUS PORT
USBP1-, USBP1+	
XD0 - XD7	: XD DATA BUS
XDIR	: XD BUS DIRECTION CONTROL

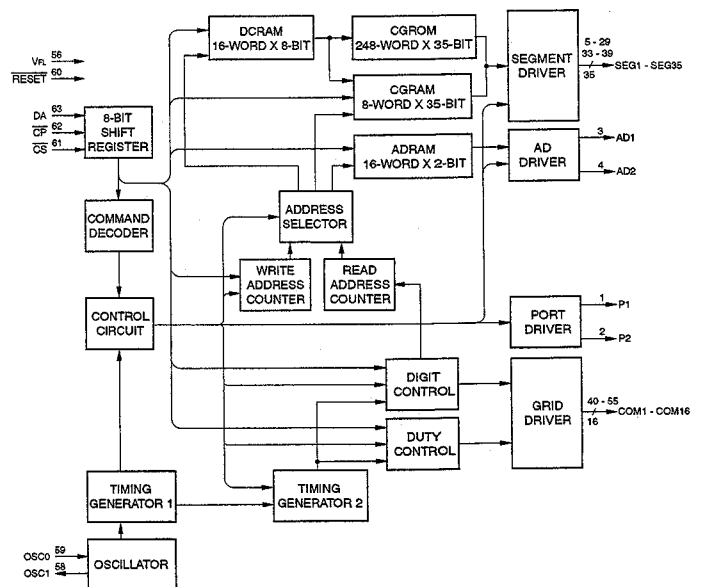
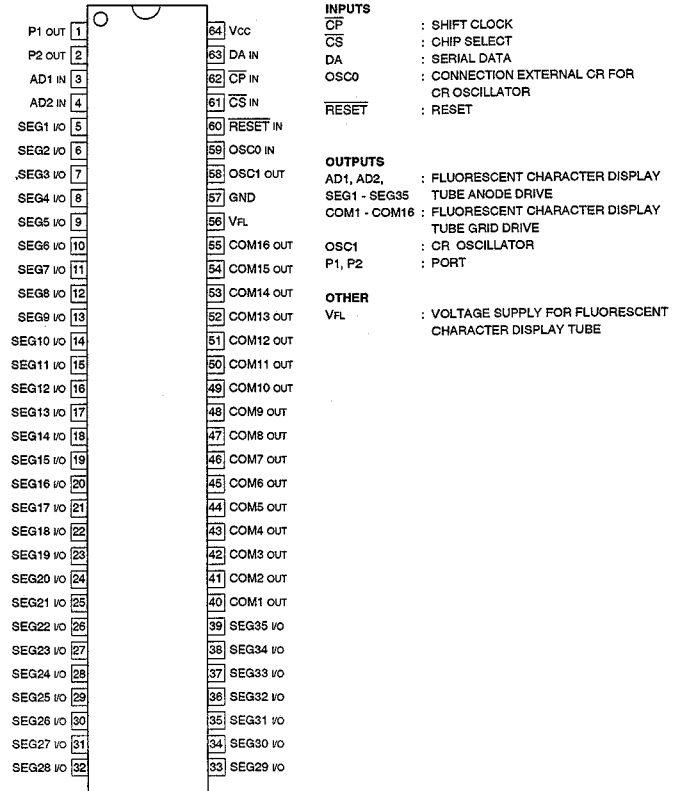
M48T08Y-10MH1TR (ST)

64 K (8184 × 8)-BIT NON-VOLATILE SRAM AND REAL TIME CLOCK
—TOP VIEW—

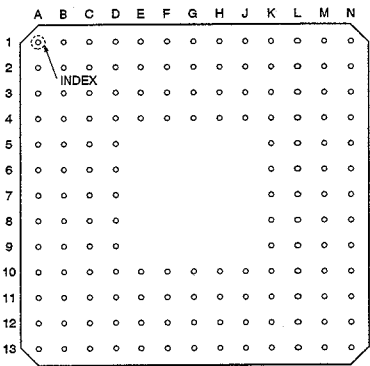


MSM9202-03GS-K (OKI)

DISPLAY CONTROLLER DRIVER
—TOP VIEW—



TMS320DA150GGU120 (TI)
FIXED-POINT DIGITAL SIGNAL PROCESSOR
—BOTTOM VIEW—



PIN NO.	I/O	SIGNAL	PIN NO.	I/O	SIGNAL	PIN NO.	I/O	SIGNAL	PIN NO.	I/O	SIGNAL
A1	—	GND1	C11	—	GND2	G10	I	HPIENA	L4	I/O	BCLKR2
A2	I/O	A21	C12	I/O	A16	G11	—	Vcc1	L5	I	HCNTL1
A3	I/O	A8	C13	I/O	D5	G12	I	TMS	L6	—	GND1
A4	I/O	A5	D1	I/O	A12	G13	—	GND1	L7	O	HRDY
A5	I/O	A2	D2	I/O	A11	H1	O	DS	L8	O	BDX0
A6	I	HDS2	D3	I/O	HD7	H2	O	IS	L9	I	NMI
A7	—	GND1	D4	I/O	A10	H3	O	R/W	L10	I	INT3
A8	I/O	HD5	D5	I/O	A4	H4	O	MSTRB	L11	—	GND1
A9	I/O	HD4	D6	I/O	A1	H10	O	TDO	L12	—	DVcc
A10	I/O	D9	D7	—	GND2	H11	I	TDI	L13	—	GND2
A11	—	Vcc2	D8	I/O	D13	H12	I	TRST	M1	I	BDR1
A12	I/O	A20	D9	I/O	D10	H13	I	TCK	M2	I/O	BFSR1
A13	I/O	A19	D10	I/O	D6	J1	O	IOSTRB	M3	I	HCNTL0
B1	I/O	A22	D11	I/O	D4	J2	O	MSC	M4	I/O	BFSR0
B2	—	GND2	D12	I/O	D3	J3	O	XF	M5	I	BDR2
B3	I/O	A9	D13	I/O	D2	J4	O	HOLDA	M6	O	HINT
B4	I/O	A6	E1	—	Vcc1	J10	I/O	HD2	M7	I/O	BFSX0
B5	I/O	A3	E2	I/O	A15	J11	O	TOUT	M8	I/O	HD0
B6	—	Vcc2	E3	I/O	A14	J12	I/O	EMU0	M9	I	HBIL
B7	—	Vcc1	E4	I/O	A13	J13	I/O	EMU1/OFF	M10	I	INT2
B8	I/O	D15	E10	I/O	D1	K1	O	IAQ	M11	I/O	HD1
B9	I/O	D12	E11	I/O	D0	K2	I	HOLD	M12	—	GND2
B10	I/O	D8	E12	I	RS	K3	I	BIO	M13	O	BDX1
B11	—	GND1	E13	I	X2/CLKIN	K4	I/O	BCLKR0	N1	—	GND1
B12	I/O	A18	F1	—	Vcc1	K5	I	BDR0	N2	I/O	BCLKR1
B13	I/O	A17	F2	—	GND1	K6	I/O	BCLKX2	N3	—	GND2
C1	—	Vcc2	F3	—	GND2	K7	—	Vcc2	N4	I/O	BFSR2
C2	—	GND1	F4	I	HAS	K8	O	BDX2	N5	I/O	BCLKX0
C3	—	Vcc1	F10	O	X1	K9	I	INT0	N6	—	Vcc1
C4	I/O	A7	F11	I/O	HD3	K10	I	CLKMD1	N7	I/O	BFSX2
C5	I/O	HD6	F12	O	CLKOUT	K11	I	CLKMD2	N8	—	GND2
C6	I/O	A0	F13	—	GND2	K12	I	CLKMD3	N9	O	IAQ
C7	I	HDS1	G1	I	HR/W	K13	I	HPI16	N10	I	INT1
C8	I/O	D14	G2	I	HCS	L1	I	MP/MC	N11	—	Vcc1
C9	I/O	D11	G3	I	READY	L2	—	DVcc	N12	I/O	BCLKX1
C10	I/O	D7	G4	O	PS	L3	—	GND1	N13	I/O	BFSX1

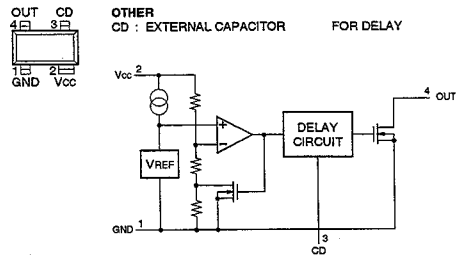
- INPUTS
- BDR0 - BDR2 : SERIAL DATA RECEIVE
 - BIO : BRANCH CONTROL
 - CLKMD1 - CLKMD3 : CLOCK MODE SELECT
 - HAS : ADDRESS STROBE
 - HBIL : BYTE IDENTIFICATION
 - HCNTL0, HCNTL1 : CONTROL
 - HCS : CHIP SELECT
 - HDS1 - HDS2 : DATA STROBE
 - HOLD : HOLD
 - HPI16 : HPI16 MODE SELECT
 - HPIENA : HPI MODULE SELECT
 - HR/W : READ/WRITE
 - INT0 - INT3 : EXTERNAL USER INTERRUPT
 - MP/MC : MICROPROCESSOR/MICROCOMPUTER MODE SELECT
 - NMI : NONMASKABLE INTERRUPT
 - READY : DATA READY
 - RS : RESET
 - TCK : IEEE STANDARD 1149.1 TEST CLOCK
 - TDI : IEEE STANDARD 1149.1 TEST DATA
 - TMS : IEEE STANDARD 1149.1 TEST MODE
 - TRST : IEEE STANDARD 1149.1 TEST RESET
 - X2/CLKIN : CLOCK/OSCILLATOR

- OUTPUTS
- BDX0 - BDX2 : SERIAL DATA TRANSMIT
 - CLKOUT : CLOCK
 - DS, IS, PS : DATA, PROGRAM, AND I/O SPASE SELECT
 - HINT : INTERRUPT
 - HOLDA : HOLD ACKNOWLEDGE
 - HRDY : READY
 - IAQ : INTERRUPT ACKNOWLEDGE
 - IAQ : INSTRUCTION ACQUISITION
 - IOSTRB : I/O STROBE
 - MSC : MICROSTATE COMPLETE
 - MSTRB : MEMORY STROBE
 - R/W : READ/WRITE
 - TDO : IEEE STANDARD 1149.1 TEST DATA
 - TOUT : TIMER
 - X1 : INTERNAL OSCILLATOR
 - XF : EXTERNAL FLAG

- INPUTS/OUTPUTS
- A0 - A22 : PARALLEL ADDRESS
 - BCLKR0 - BCLKR2 : RECEIVE CLOCK
 - BCLKX0 - BCLKX2 : TRANSMIT CLOCK
 - BFSR0 - BFSR2 : FRAME SYNCHRONIZATION PULSE FOR RECEIVE
 - BFSX0 - BFSX2 : FRAME SYNCHRONIZATION PULSE FOR TRANSMIT
 - D0 - D15 : PARALLEL DATA
 - EMU0 : EMULATOR 0 PIN
 - EMU1/OFF : EMULATOR 1 PIN/DISABLE ALL
 - HD0 - HD7 : PARALLEL BIDIRECTIONAL DATA

S-80928CNNB-G8Y-T2 (SEIKO INSTR)

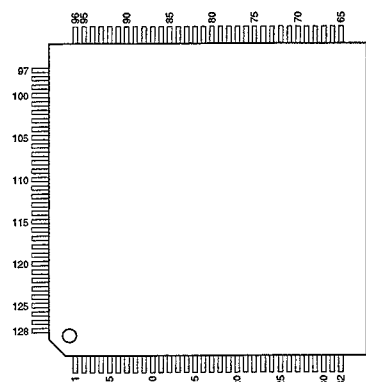
VOLTAGE DETECTOR WITH N-CHANNEL OPEN DRAIN OUTPUT
—TOP VIEW—



TSB43AB22 (TI)
TSB43AB22APDT

IEEE1394A OHCI PHYSICAL / LINK-LAYER CONTROLLER

—TOP VIEW—



INPUTS

- CPS : CABLE POWER STATUS
- G RST : GLOBAL POWER RESET
- PC0 - PC2 : POWER CLASS PROGRAMMING
- PCI CLK : PCI BUS CLOCK
- PCI GNT : PCI BUS GRANT
- PCI IDSEL : INITIALIZATION DEVICE SELECT
- PCI RST : PCI RESET
- REG EN : REGULATOR ENABLE

OUTPUTS

- CINT : CARD BUS INTERRUPT
- CSTSCHG : CARD STATUS CHANGE
- PCI INTA : INTERRUPT
- PCI PME : POWER MANAGEMENT EVENT
- PCI REQ : PCI BUS REQUEST
- PCI SERR : PCI SYSTEM ERROR

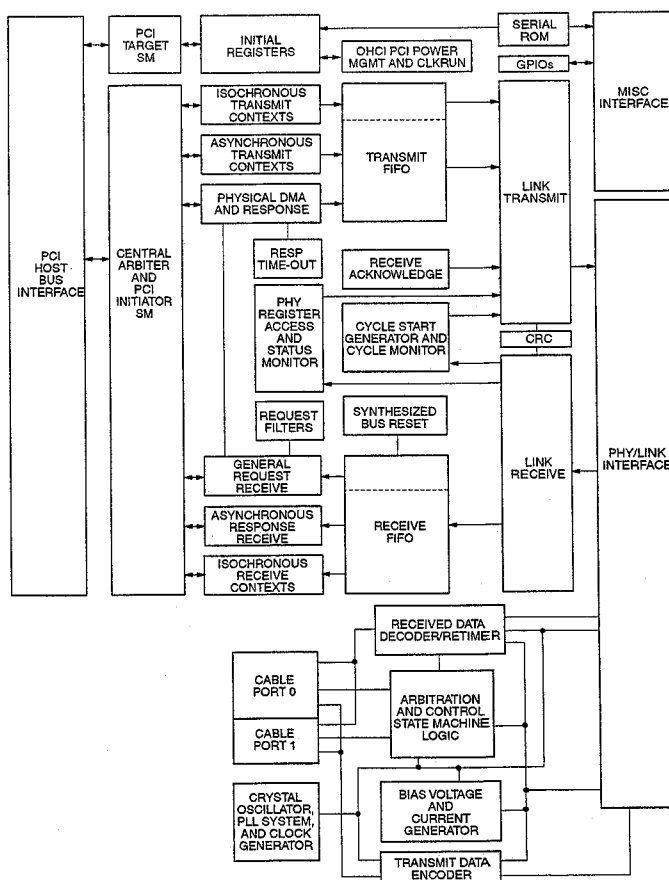
INPUTS/OUTPUTS

- BE0 - BE3 : BYTE ENABLE
- CARDBUS : CARD BUS CIS BASE ADDRESS REGISTER SELECT
- CNA : CABLE NOT ACTIVE
- CYCLEIN, CYCLEOUT : CYCLE TIMER SYNCHRONIZATION
- FILTER0, FILTER1 : PLL FILTER
- GPIO2, GPIO3 : GENERAL PURPOSE I/O
- PCI AD0 - PCI AD31 : PCI ADDRESS/DATA BUS
- PCI C : PCI BUS COMMAND
- PCI CLKRUN : CLOCK RUN
- PCI DEVSEL : PCI DEVICE SELECT
- PCI FRAME : PCI CYCLE FRAME
- PCI IRDY : PCI INITIATOR READY
- PCI PAR : PCI PARITY
- PCI PERR : PCI PARITY ERROR INDICATOR
- PCI STOP : PCI SYCLE STOP
- PCI TRDY : PCI TARGET READY
- SCL : SERIAL CLOCK
- SDA : SERIAL DATA
- TEST0 - TEST3, TEST8, TEST9, TEST16, TEST17 : TEST
- TPA0+, TPA1+, TPB0+, TPB1+, TPB1A0-, TPB1A1- : TWISTED-PAIR CABLE
- TPB1A0-, TPB1A1- : TWISTED-PAIR BIAS

OTHERS

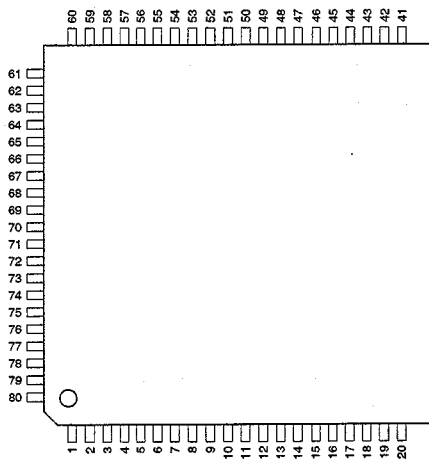
- R0, R1 : CURRENT SETTING RESISTOR
- REG18 : 1.8 V POWER SUPPLY FOR DEVICE CORE
- Vccp : PCI SIGNALING CLAMP VOLTAGE POWER
- XI, XO : CRYSTAL OSCILLATOR

PIN NO.	I/O	SIGNAL	PIN NO.	I/O	SIGNAL	PIN NO.	I/O	SIGNAL	PIN NO.	I/O	SIGNAL
1	—	A.Vcc	33	—	D.GND	65	I/O	PCI AD13	97	I	PC2
2	—	A.Vcc	34	I/O	PCI C/BE3	66	I/O	PCI AD12	98	I	PC1
3	I/O	FILTER0	35	—	Vccp	67	I/O	PCI AD11	99	I	PC0
4	I/O	FILTER1	36	I	PCI IDSEL	68	—	D.GND	100	—	D.Vcc
5	—	XI	37	I/O	PCI AD23	69	I/O	PCI AD10	101	I/O	TEST3
6	—	XO	38	I/O	PCI AD22	70	I/O	PCI AD9	102	I/O	TEST2
7	—	PLL Vcc	39	—	D.Vcc	71	I/O	PCI AD8	103	—	D.GND
8	—	PLL GND	40	I/O	PCI AD21	72	—	D.Vcc	104	I/O	TEST1
9	I	REG EN	41	I/O	PCI AD20	73	I/O	PCI C/BE0	105	I/O	TEST0
10	I/O	TEST17	42	I/O	PCI AD19	74	I/O	PCI AD7	106	I	CPS
11	I/O	TEST16	43	I/O	PCI AD18	75	—	D.GND	107	—	A.Vcc
12	I/O	PCI CLKRUN	44	—	D.GND	76	I/O	PCI AD6	108	—	A.Vcc
13	O	PCI INTA/CINT	45	I/O	PCI AD17	77	I/O	PCI AD5	109	—	A.GND
14	I	G RST	46	I/O	PCI AD16	78	—	Vccp	110	—	A.GND
15	—	D.Vcc	47	I/O	PCI C/BE2	79	I/O	PCI AD4	111	—	A.GND
16	I	PCI CLK	48	—	Vccp	80	I/O	PCI AD3	112	I/O	TPB0-
17	—	D.GND	49	I/O	PCI FRAME	81	I/O	PCI AD2	113	I/O	TPB0+
18	I	PCI GNT	50	I/O	PCI IRDY	82	I/O	PCI AD1	114	I/O	TPA0-
19	O	PCI REQ	51	—	D.Vcc	83	—	D.GND	115	I/O	TPA0+
20	—	Vccp	52	I/O	PCI TRDY	84	I/O	PCI AD0	116	I/O	TPB1A0-
21	O	PCI PMEGSTSCHG	53	I/O	PCI DEVSEL	85	I	PCI RST	117	—	A.GND
22	I/O	PCI AD31	54	I/O	PCI STOP	86	I/O	CYCLEOUT/CARDBUS	118	—	R0
23	—	D.GND	55	—	D.GND	87	I/O	CYCLEIN	119	—	R1
24	I/O	PCI AD30	56	I/O	PCI PERR	88	—	D.Vcc	120	—	A.Vcc
25	I/O	PCI AD29	57	O	PCI SERR	89	I/O	GPIO3	121	I/O	TPB1-
26	I/O	PCI AD28	58	I/O	PCI PAR	90	I/O	GPIO2	122	I/O	TPB1+
27	—	D.Vcc	59	—	D.Vcc	91	I/O	SCL	123	I/O	TPA1-
28	I/O	PCI AD27	60	I/O	PCI C/BE1	92	I/O	SDA	124	I/O	TPA1+
29	I/O	PCI AD26	61	I/O	PCI AD15	93	—	REG18	125	I/O	TPB1A1-
30	—	REG18	62	—	Vccp	94	I/O	TEST9	126	—	A.GND
31	I/O	PCI AD25	63	I/O	PCI AD14	95	I/O	TEST8	127	—	A.GND
32	I/O	PCI AD24	64	—	D.GND	96	I/O	CNA	128	—	A.GND



TVP5145PFP (TI)

DIGITAL VIDEO DECODER —TOP VIEW—



PIN NO.	I/O	SIGNAL	PIN NO.	I/O	SIGNAL	PIN NO.	I/O	SIGNAL	PIN NO.	I/O	SIGNAL
1	O	BG	21	—	D.GND	41	O	Y2	61	O	UV8
2	O	CLAMP1	22	O	RSTOUTB	42	O	Y3	62	O	UV9
3	—	A.GND CH1	23	I	RSTINB	43	O	Y4	63	I/O	D0
4	I	VI 1B	24	I	OEB	44	—	D.Vcc	64	I/O	D1
5	I	VI 1A	25	O	SCLK	45	O	Y5	65	—	D.Vcc
6	—	A.Vcc CH1	26	O	PREF	46	O	Y6	66	I/O	D2
7	O	REFM	27	O	PCLK	47	—	D.GND	67	I/O	D3
8	O	REFP	28	I/O	AVID	48	O	Y7	68	—	D.GND
9	—	A.Vcc CH2	29	O	VSYN	49	O	Y8	69	I/O	D4
10	I	VI 2A	30	O	HSYN	50	O	Y9	70	I/O	D5
11	I	VI 2B	31	I/O	GLCO/RTC	51	O	UV0	71	I/O	D6
12	—	A.GND CH2	32	I/O	PALI	52	O	UV1	72	I/O	D7
13	O	CLAMP2	33	I/O	FID	53	O	UV2	73	I	A0
14	I	VI 3A	34	—	D.Vcc	54	—	D.Vcc	74	I	A1
15	I	VI 3B	35	I	XTAL1	55	O	UV3	75	—	D.Vcc
16	—	A.GND AFE	36	O	XTAL2	56	O	UV4	76	I	VC3
17	—	NSUB	37	—	D.GND	57	—	D.GND	77	I/O	VC2
18	—	A.Vcc AFE	38	I/O	GPCL	58	O	UV5	78	I/O	VC1
19	—	A.Vcc PLL	39	O	Y0	59	O	UV6	79	I/O	VC0
20	—	A.GND PLL	40	O	Y1	60	O	UV7	80	O	INTREQ

INPUTS

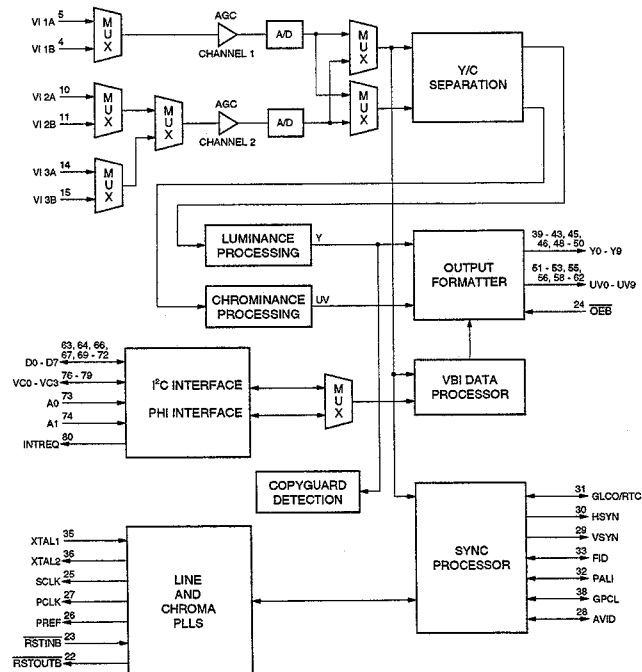
A0, A1	: PHI ADDRESS PORT
OEB	: OUTPUT ENABLE FOR Y AND UV TERMINALS
RSTINB	: RESET
VC3	: PHI MODE:CHIP SELECT, I ² C MODE:CONTROLLED ADDRESS SELECT
VI 1A - VI 3A,	: ANALOG VIDEO
VI 1B - VI 3B	
XTAL1	: EXTERNAL CLOCK REFERENCE

OUTPUTS

BG	: CAPACITOR CONNECTION
CLAMP1, CLAMP2	: CLAMP VOLTAGE
HSYN	: HORIZONTAL SYNC
INTREQ	: INTERRUPT REQUEST
PCLK	: LINE-LOCKED PIXEL CLOCK
PREF	: LINE-LOCKED CLOCK PHASE REFERENCE SIGNAL
REFM, REFP	: A/D REFERENCE SUPPLY
RSTOUTB	: RESET
SCLK	: LINE-LOCKED SYSTEM CLOCK
UV0 - UV9	: 10-BIT DIGITAL CHROMINANCE
VSYN	: VERTICAL SYNC
XTAL2	: EXTERNAL CLOCK REFERENCE
Y0 - Y9	: 10-BIT DIGITAL LUMINANCE

INPUTS/OUTPUTS

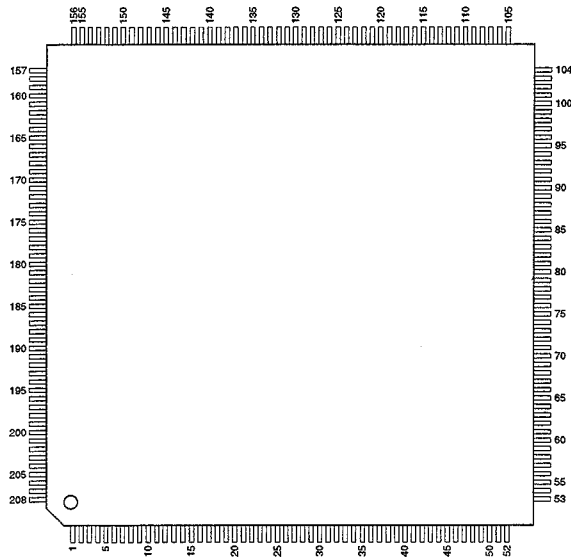
AVID	: ACTIVE VIDEO INDICATOR
D0 - D7	: PHI DATA
FID	: ODD/EVEN FIELD INDICATOR OR VERTICAL LOCK INDICATOR
GLCO/RTC	: COLOR PLL INFORMATION
GPCL	: GENERAL-PURPOSE CONTROL LOGIC
PALI	: PAL LINE INDICATOR OR HORIZONTAL LOCK INDICATOR
VC0	: PHI MODE:ACKNOWLEDGEMENT OR READY, I ² C MODE:SERIAL CLOCK
VC1	: PHI MODE:READ-WRITE OR WRITE, I ² C MODE:SERIAL DATA
VC2	: DATA STROBE OR READ



UPD61051GD-LML (NEC)

MPEG2 AUDIO/VIDEO ENCODER

—TOP VIEW—



INPUTS

AMCLK	: AUDIO CLOCK
CA0 - CA5	: ADDRESS
CCS	: CHIP SELECT
CMODE0	: CWAIT SIG SELECT
CMODE1	: CWAIT FUNCTION
CMODE2	: PARALLEL/SERIAL SELECT
CRE	: READ ENABLE
CCLK	: SPI CLOCK
CSDI	: SPI DATA
CWE	: WRITE ENABLE
FD0 - FD7	: DATA BUS FOR INSTRUCTION ROM
IABCK	: BIT CLOCK
IABD	: BIT DATA
IALRCK	: L/R CHANNEL CLOCK
IS0 - IS7	: STREAM DATA
ISCLK	: STREAM DATA CLOCK
ISERR	: STREAM ERROR
ISSTB	: STREAM DATA STROBE
ISSYNC	: STREAM DATA SYNC
ISVLD	: STREAM DATA VLIDE
IVCLK	: VIDEO CLOCK
IVFLD	: FIELD INDEX
IVHSYNC	: HORIZONTAL SYNC
IVVSYNC	: VERTICAL SYNC
IVIN0 - IVIN7	: VIDEO DATA
NCLK	: SERIAL CLOCK
NDI	: DATA INPUT
NMOD	: FUNCTION MODE SERELCT
NRST	: RESET
OSREQ	: STREAM DATA REQUEST
PSTOP	: INTERNAL PLL CONTROL
RESET	: RESET
SCLK	: SYSTEM CLOCK
STCLK	: SYSTEM TIME CLOCK

PIN NO.	I/O	SIGNAL	PIN NO.	I/O	SIGNAL	PIN NO.	I/O	SIGNAL	PIN NO.	I/O	SIGNAL
1	—	Vcc2	53	I	ISCLK/ISSTB	105	—	Vcc2	157	I	CWE/CSDI
2	I	AMCLK	54	I	ISVLD	106	O	MA4	158	I	CMODE2
3	—	GND	55	O	ISREQ	107	—	GND	159	I	CCS
4	I/O	OALRCK	56	O	OS0/FA0	108	O	MA5	160	I	CRE
5	I/O	OABCK	57	O	OS1/FA7	109	O	MA6	161	O	CWAIT/FOE
6	I/O	OABD	58	O	OS2/FA8	110	—	Vcc2	162	I/O	CD0/FD0
7	I	IALRCK	59	O	OS3/FA9	111	O	MA7	163	—	Vcc2
8	I	IABCK	60	—	Vcc2	112	—	GND	164	I/O	CD1/FD1
9	I	IABD	61	O	OS4/FA10	113	O	MA8	165	—	GND
10	—	GND	62	—	GND	114	O	MA9	166	I/O	CD2/FD2
11	I	IVFLD	63	O	OS5/FA11	115	O	MA11	167	I/O	CD3/FD3
12	I	IVHSYNC	64	O	OS6/FA12	116	O	MCLK	168	I/O	CD4/FD4
13	—	Vcc2	65	O	OS7/FA13	117	—	Vcc2	169	I/O	CD5/FD5
14	I	IVVSYNC	66	O	OSCLK/OSSTB	118	O	MCLK	170	I/O	CD6/FD6
15	—	GND	67	O	OSSYNC	119	—	GND	171	—	Vcc2
16	I	IVIN0	68	O	OSVLD/OSRDY	120	O	MCS	172	I/O	CD7/FD7
17	I	IVIN1	69	—	Vcc2	121	O	MRAS	173	—	GND
18	I	IVIN2	70	I	OSREQ	122	—	Vcc2	174	I	NCLK
19	I	IVIN3	71	—	Vcc2	123	O	MCAS	175	—	Vcc2
20	I	IVIN4	72	I/O	MD23	124	—	GND	176	I	NRST
21	I	IVIN5	73	—	GND	125	O	MWE	177	—	GND
22	I	IVIN6	74	—	GND	126	O	MDQM	178	I	NMOD
23	I	IVIN7	75	I/O	MD22	127	I/O	MD7	179	I	NDI
24	—	Vcc2	76	I/O	MD21	128	—	Vcc2	180	O	NDO
25	I	IVCLK	77	I/O	MD20	129	I/O	MD8	181	O	CA0/FA0
26	—	GND	78	I/O	MD19	130	—	GND	182	O	CA1/FA1
27	—	GND	79	I/O	MD18	131	I/O	MD5	183	O	CA2/FA2
28	I	SCLK	80	I/O	MD17	132	I/O	MD4	184	O	CA3/FA3
29	I	PSTOP	81	I/O	MD16	133	I/O	MD3	185	O	CA4/FA4
30	—	PVcc2	82	—	Vcc2	134	I/O	MD2	186	—	Vcc2
31	—	PGND	83	I/O	MD24	135	—	Vcc2	187	O	CA5/FA5
32	—	PVcc2	84	—	GND	136	I/O	MD1	188	—	GND
33	—	PGND	85	I/O	MD25	137	—	GND	189	I/O	GPI00
34	I	STCLK	86	—	Vcc2	138	I/O	MD0	190	I/O	GPI01
35	—	GND	87	I/O	MD26	139	I/O	MD8	191	I/O	GPI02
36	—	Vcc2	88	—	GND	140	—	Vcc2	192	I/O	GPI03
37	—	GND	89	I/O	MD27	141	I/O	MD9	193	I/O	GPI04
38	—	GND	90	I/O	MD28	142	—	GND	194	—	Vcc2
39	—	Vcc2	91	I/O	MD29	143	I/O	MD10	195	O	GPI05/OVHSYNC
40	O	PWM	92	I/O	MD30	144	I/O	MD11	196	—	GND
41	—	GND	93	I/O	MD31	145	I/O	MD12	197	O	GPI06/OVVSNC
42	I	IS0	94	—	Vcc2	146	I/O	MD13	198	—	Vcc2
43	I	IS1/ISERR	95	O	MA0	147	I/O	MD14	199	O	OVCLK
44	I	IS2	96	—	GND	148	—	Vcc2	200	—	GND
45	I	IS3	97	O	MA1	149	I/O	MD15	201	O	OVOUT0/FA14
46	I	IS4	98	—	Vcc2	150	—	GND	202	O	OVOUT1/FA15
47	I	IS5	99	O	MA2	151	I	RESET	203	O	OVOUT2/FA16
48	—	Vcc2	100	—	GND	152	—	Vcc2	204	O	OVOUT3/FA17
49	I	IS6	101	O	MA3	153	O	CINT	205	O	OVOUT4/FA18
50	—	GND	102	O	MA10	154	—	GND	206	O	OVOUT5/FA19
51	I	IS7	103	O	MA12	155	I	CMODE0/CCLK	207	O	OVOUT6/FA6
52	I	ISSYNC	104	O	MA13	156	O	CMODE1/CSDO	208	O	OVOUT7/FA7

OUTPUTS

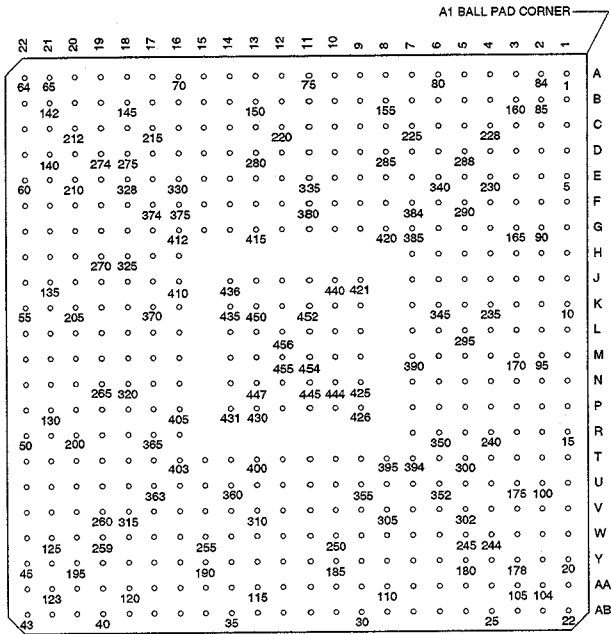
CINT	: INTERRUPT
CSDO	: SPI DATA
CWAIT	: WAIT
FA0 - FA19	: ADDRESS BUS FOR INSTRUCTION ROM
FOE	: OUTPUT ENABLE FOR INSTRUCTION ROM
GPI05, GPI06	: FIRMWARE
ISREQ	: STREAM DATA REQUEST
MA0 - MA13	: SDRAM LOW/COLUMN ADDRESS
MCAS	: COLUMN ADDRESS STROBE
MCLK	: CLOCK
MCLK	: CLOCK ENABLE
MCS	: CHIP SELECT
MDQM	: DATA ACCESS
MRAS	: LOW ADDRESS STROBE
MWE	: WRITE ENABLE
NDO	: DATA OUTPUT
OS0 - OS7	: STREAM DATA
OSCLK/OSSTB	: STREAM DATA CLOCK/STROBE
OSSYNC	: STREAM DATA SYNC
OSVLD/OSRDY	: STREAM DATA VALID/READY
OVCLK	: VIDEO CLOCK
OVOUT0 - OVOUT7	: VIDEO DATA
OVHSYNC	: HORIZONTAL SYNC
OVVSYNC	: VERTICAL SYNC
PWM	: PWM

INPUTS/OUTPUTS

CD0 - CD7	: DATA BUS
GPI00 - GPI04	: FIRMWARE
MD0 - MD31	: SDRAM DATA
OABCK	: BIT CLOCK
OABD	: BIT DATA
OALRCK	: L/R CHANNEL CLOCK

XC2S150-5FG456C1 (XILINX)
XC2S200-5FG456C1 (XILINX)

FIELD PROGRAMMABLE GATE ARRAY
—BOTTOM VIEW—



INPUTS
CS : CHIP SELECT SIGNAL
D0 - D7 : CONFIGURATION DATA
DIN : SINGLE DATA
GCK0 - GCK3 : GLOBAL CLOCK
I : INPUT
M0 - M2 : MODE
PROGRAM : PROGRAM
TCK : TEST CLOCK
TDI : TEST DATA
TMS : TEST MODE SELECT
VREF : REFERENCE VOLTAGE
WRITE : WRITE ENABLE SIGNAL

OUTPUTS
BUSY/DOUT : BUSY/SERIAL CONFIGURATION DATA
TDO : TEST DATA

INPUTS/OUTPUTS
CLK : CONFIGURATION CLOCK
DONE : INPUT FOR DELAYING THE GLOBAL LOGIC INITIALIZATION & OUTPUT ENABLE/OUTPUT FOR INDICATING THE COMPLETION OF THE CONFIGURATION
I/O : INPUT/OUTPUT
INIT : INTERNAL CONFIGURATION MEMORY CLEAR

OTHER
NC : NO CONNECTION

PIN NO.	I/O	SIGNAL	PIN NO.	I/O	SIGNAL	PIN NO.	I/O	SIGNAL	PIN NO.	I/O	SIGNAL
A1	—	GND	P3	I/O	I/O	E6	I/O	I/O	D9	I/O	I/O
B1	I/O	I/O	R9	—	NC	F6	—	Vcc	E9	I/O	I/O
C1	I/O	I/O	T3	I/O	VREF, I/O	G6	—	Vcc	F9	—	Vcc
D1	—	NC	U3	—	NC	H6	—	Vcc	G9	—	Vcc
E1	I/O	I/O	V3	I/O	I/O	J6	—	Vcc	J9	—	GND
F1	I/O	I/O	W3	I/O	I/O	K6	—	Vcc	K9	—	GND
G1	I/O	I/O	Y3	—	GND	L6	I/O	I/O	L9	—	GND
H1	I/O	I/O	AA3	—	NC	M6	I/O	I/O	M9	—	GND
J1	I/O	NC ¹ I/O ²	AB3	I/O	I/O	N6	—	Vcc	N9	—	GND
K1	I/O	I/O	AC3	I/O	I/O	P6	—	Vcc	P9	—	GND
L1	I/O	I/O	AD3	I/O	I/O ¹ VREF, I/O ²	R6	—	Vcc	T9	—	Vcc
M1	I/O	I/O	AE3	O	TCK	T6	—	Vcc	U9	—	Vcc
N1	I/O	NC ¹ I/O ²	AF3	—	NC	U6	—	Vcc	V9	I/O	I/O
P1	I/O	NC ¹ I/O ²	AG3	I/O	I/O	V6	—	NC	W9	I/O	I/O
R1	I/O	I/O	AH3	I/O	I/O	W6	I/O	I/O	Y9	I/O	I/O
T1	I/O	I/O	AI3	I/O	I/O	X6	I/O	I/O ¹ VREF, I/O ²	AA9	I/O	NC ¹ I/O ²
U1	I/O	I/O	AJ3	I/O	VREF, I/O	AA6	I/O	I/O	AB9	I/O	I/O
V1	I/O	I/O	AK3	I/O	NC ¹ I/O ²	AB6	I/O	I/O	A10	I/O	I/O
W1	I/O	I/O	AL3	I/O	I/O	A7	I/O	I/O	B10	I/O	I/O
X1	I/O	I/O ¹ VREF, I/O ²	AM3	I/O	I/O	B7	I/O	I/O	C10	I/O	I/O
AA1	—	NC	AO3	I/O	I/O	C7	I/O	I/O	D10	I/O	I/O
AB1	—	GND	AP3	I/O	I/O	D7	I/O	I/O	E10	I/O	I/O
A2	—	NC	P4	I/O	I/O	E7	I/O	I/O	F10	—	Vcc
B2	—	GND	R4	I/O	VREF, I/O	F7	—	Vcc	G10	—	Vcc
C2	—	NC	T4	I/O	I/O	G7	—	Vcc	J10	—	GND
D2	I/O	I/O ¹ VREF, I/O ²	U4	I/O	I/O	H7	—	Vcc	K10	—	GND
E2	I/O	VREF, I/O	V4	I/O	I/O	J7	—	Vcc	L10	—	GND
F2	VREF	I/O	W4	—	NC	K7	—	Vcc	M10	—	GND
G2	—	NC	Y4	I	M2	L7	—	Vcc	N10	—	GND
H2	I/O	I/O	AA4	I/O	I/O	M7	—	Vcc	P10	—	GND
J2	I/O	I/O	AB4	I/O	I/O	N7	—	Vcc	T10	—	Vcc
K2	I/O	NC ¹ I/O ²	AC4	I/O	I/O	P7	—	Vcc	U10	—	Vcc
L2	—	NC	AD4	I/O	I/O	R7	—	Vcc	V10	I/O	I/O
M2	—	NC	AE4	I/O	I/O	T7	—	Vcc	W10	I/O	I/O
N2	I/O	VREF, I/O	AF4	I/O	I/O	U7	—	Vcc	X10	I/O	VREF, I/O
P2	I/O	I/O	AG4	—	Vcc	V7	I/O	I/O	AA10	I/O	NC ¹ I/O ²
R2	I/O	I/O	AH4	I/O	I/O	W7	I/O	I/O	AB10	I/O	I/O
T2	I/O	I/O	AI4	I/O	I/O	X7	I/O	I/O	AC11	—	I, GCK2
U2	I/O	I/O	AJ4	I/O	I/O	AA7	I/O	I/O	BD11	—	NC
V2	I/O	I/O	AK4	I/O	I/O	AB7	—	NC	CE11	—	I, GCK3
W2	I/O	I/O	AL4	I/O	I/O	AC7	I/O	I/O	D11	I/O	I/O
X2	I/O	I/O	AM4	I/O	I/O	AD7	I/O	I/O	E11	I/O	I/O
AA2	—	GND	AN4	I/O	I/O	AE7	I/O	NC ¹ I/O ²	F11	I/O	NC ¹ I/O ²
AB2	I	M2	AO4	I/O	I/O	AF7	I/O	I/O	G11	—	Vcc
AC2	—	M2	AP4	I/O	I/O	AG7	I/O	VREF, I/O	J11	—	GND
AD2	—	GND	AQ4	I/O	I/O	AH7	—	Vcc	K11	—	GND
AE2	—	GND	AR4	I/O	I/O	AI7	—	Vcc	L11	—	GND
AF2	—	GND	AS4	I/O	I/O	AJ7	—	Vcc	M11	—	GND
AG2	—	GND	AT4	I/O	I/O	AK7	—	Vcc	N11	—	GND
AH2	—	GND	AW4	I/O	I/O	AL7	—	Vcc	P11	—	GND
AI2	—	GND	AX4	I/O	I/O	AM7	—	Vcc	T11	—	Vcc
AJ2	—	GND	AY4	I/O	I/O	AN7	—	Vcc	U11	I/O	I/O
AK2	—	GND	AZ4	I/O	I/O	AO7	—	Vcc	V11	I/O	I/O
AL2	—	GND	BA4	I/O	I/O	AP7	—	Vcc	W11	I/O	I/O
AM2	—	GND	BB4	I/O	I/O	AQ7	—	Vcc	X11	I	I, GCK1
AN2	—	GND	BC4	I/O	I/O	AR7	—	Vcc	Y11	—	NC
AO2	—	GND	BD4	I/O	I/O	AS7	—	Vcc	Z11	—	NC
AP2	—	GND	BE4	I/O	I/O	AT7	—	Vcc	AA12	—	NC
AQ2	—	GND	BF4	I/O	I/O	AW7	—	Vcc	AB12	—	I/O
AR2	—	GND	BG4	I/O	I/O	AX7	—	Vcc			
AS2	—	GND	BH4	I/O	I/O	AY7	—	Vcc			
AT2	—	GND	BI4	I/O	I/O	AZ7	—	Vcc			
AU2	—	GND	BJ4	I/O	I/O	BA7	—	Vcc			
AV2	—	GND	BK4	I/O	I/O	BB7	—	Vcc			
AW2	—	GND	BL4	I/O	I/O	BC7	—	Vcc			
AX2	—	GND	BM4	I/O	I/O	BD7	—	Vcc			
AY2	—	GND	BN4	I/O	I/O	BE7	—	Vcc			
AZ2	—	GND	BO4	I/O	I/O	BF7	—	Vcc			
BA2	—	GND	BP4	I/O	I/O	BG7	—	Vcc			
BB2	—	GND	BQ4	I/O	I/O	BH7	—	Vcc			
BC2	—	GND	BR4	I/O	I/O	BI7	—	Vcc			
BD2	—	GND	BS4	I/O	I/O	BJ7	—	Vcc			
BE2	—	GND	BT4	I/O	I/O	BK7	—	Vcc			
BF2	—	GND	BU4	I/O	I/O	BL7	—	Vcc			
BG2	—	GND	BV4	I/O	I/O	BM7	—	Vcc			
BH2	—	GND	BW4	I/O	I/O	BN7	—	Vcc			
BI2	—	GND	BX4	I/O	I/O	BO7	—	Vcc			
BJ2	—	GND	BY4	I/O	I/O	BP7	—	Vcc			
BK2	—	GND	BZ4	I/O	I/O	BQ7	—	Vcc			
BL2	—	GND	CA4	I/O	I/O	BR7	—	Vcc			
BM2	—	GND	CB4	I/O	I/O	BS7	—	Vcc			
BN2	—	GND	CC4	I/O	I/O	BT7	—	Vcc			
BO2	—	GND	CD4	I/O	I/O	BU7	—	Vcc			
BP2	—	GND	CE4	I/O	I/O	BV7	—	Vcc			
BQ2	—	GND	CF4	I/O	I/O	BW7	—	Vcc			
BR2	—	GND	CG4	I/O	I/O	BX7	—	Vcc			
BS2	—	GND	CH4	I/O	I/O	BY7	—	Vcc			
BT2	—	GND	CI4	I/O	I/O	BZ7	—	Vcc			
BU2	—	GND	CK4	I/O	I/O	CA7	—	Vcc			
BV2	—	GND	CL4	I/O	I/O	CB7	—	Vcc			
BW2	—	GND	CM4	I/O	I/O	CC7	—	Vcc			
BX2	—	GND	CN4	I/O	I/O	CD7	—	Vcc			
BY2	—	GND	CO4	I/O	I/O	CE7	—	Vcc			
BZ2	—	GND	CP4	I/O	I/O	CF7	—	Vcc			
CA2	—	GND	CQ4	I/O	I/O	CG7	—	Vcc			
CB2	—	GND	CR4	I/O	I/O	CH7	—	Vcc			
CC2	—	GND	CS4	I/O	I/O	CI7	—	Vcc			
CD2	—	GND	CT4	I/O	I/O	CJ7	—	Vcc			
CE2	—	GND	CU4	I/O	I/O	CK7	—	Vcc			
CF2	—	GND	CV4	I/O	I/O	CL7	—	Vcc			
CG2	—	GND	CW4	I/O	I/O	CM7	—	Vcc			
CH2	—	GND	CX4	I/O	I/O	CN7	—	Vcc			
CI2	—	GND	CY4	I/O	I/O	CO7	—	Vcc			
CJ2	—	GND	CZ4	I/O	I/O	CP7	—	Vcc			
CK2	—	GND	DA4	I/O	I/O	CQ7	—	Vcc			
CL2	—	GND	DB4	I/O	I/O	CR7	—	Vcc			
CM2	—	GND	DC4	I/O	I/O	CS7	—	Vcc			
CN2	—	GND	DD4	I/O	I/O	CT7	—	Vcc			
CO2	—	GND	DE4	I/O	I/O	CU7	—	Vcc			
CP2	—	GND	DF4	I/O	I/O	CV7	—	Vcc			
CQ2	—	GND	DG4	I/O	I/O	CW7	—	Vcc			
CR2	—	GND	DH4	I/O	I/O	CX7	—	Vcc			
CS2	—	GND	DI4	I/O	I/O	CY7	—	Vcc			
CT2	—	GND	DJ4	I/O	I/O	CZ7	—	Vcc			
CU2	—	GND	DK4	I/O	I/O	CA7	—	Vcc			
CV2	—	GND	DL4	I/O	I/O	CB7	—	Vcc			
CW2	—	GND	DM4	I/O	I/O	CC7	—	Vcc			
CX2	—	GND	DN4	I/O	I/O	CD7	—	Vcc			
CY2	—	GND	DO4	I/O	I/O	CE7	—	Vcc			
CZ2	—	GND	DP4	I/O	I/O	CF7	—	Vcc			
DA2	—	GND	DQ4	I/O	I/O	CG7	—	Vcc			
DB2	—	GND	DR4	I/O	I/O	CH7	—	Vcc			
DC2	—	GND	DS4	I/O	I/O	CI7	—	Vcc			
DD2	—	GND	DT4	I/O	I/O	CJ7	—	Vcc			
DE2	—	GND	DU4	I/O	I/O	CK7	—	Vcc			
DF2	—	GND	DV4	I/O	I/O	CL7	—	Vcc			
DG2	—	GND	DW4	I/O	I/O	CM7	—	Vcc			
DH2	—	GND	DX4	I/O	I/O	CN7	—	Vcc			
DI2	—	GND	DY4	I/O	I/O	CO7	—	Vcc			
DJ2	—	GND	DZ4	I/O	I/O	CP7	—	Vcc			
DK2	—	GND	EA4	I/O	I/O	CQ7	—	Vcc			
DL2	—	GND	EB4	I/O	I/O	CR7	—	Vcc			
DM2	—	GND	EC4	I/O	I/O	CS7	—	Vcc			
DN2	—	GND	ED4	I/O	I/O	CT7	—	Vcc			
DO2	—	GND	EE4	I/O	I/O	CU7	—	Vcc			
DP2	—	GND	EF4	I/O	I/O	CV7	—	Vcc			
DQ2	—	GND	EG4	I/O	I/O	CW7	—	Vcc			
DR2	—	GND	EH4	I/O	I/O	CX7	—	Vcc			
DS2	—	GND	EI4	I/O	I/O	CY7	—	Vcc			
DT2	—	GND	EJ4	I/O	I/O	CZ7	—	Vcc			
DU2	—	GND	EK4	I/O	I/O	CA7	—	Vcc			
DV2	—	GND	EL4	I/O	I/O	CB7	—	Vcc			
DW2	—	GND	EM4	I/O	I/O	CC7	—	Vcc			
DX2	—	GND	EN4	I/O	I/O	CD7	—	Vcc			
DY2	—	GND	EO4	I/O	I/O	CE7	—	Vcc			
DZ2	—	GND	EP4	I/O	I/O	CF7	—	Vcc			
EA2	—	GND	EQ4	I/O	I/O	CG7	—	Vcc			
EB2	—	GND	ER4	I/O	I/O	CH7	—	Vcc			
EC2	—	GND	ES4	I/O	I/O	CI7	—	Vcc			
ED2	—	GND	ET4	I/O	I/O	CJ7	—	Vcc			
EE2	—	GND	EU4	I/O	I/O	CK7	—	Vcc			
EF2	—	GND	EV4	I/O	I/O	CL7	—	Vcc			
EG2	—	GND	EW4	I/O	I/O	CM7	—	Vcc			
EH2	—	GND	EX4	I/O	I/O	CN7	—	Vcc			
EI2	—	GND	EY4	I/O	I/O	CO7	—	Vcc			
EJ2	—	GND	EZ4	I/O	I/O	CP7	—	Vcc			
EK2	—	GND	FA4	I/O	I/O	CQ7	—	Vcc			
EL2	—	GND	FB4	I/O	I/O	CR7	—	Vcc			
EM2	—	GND									

Section 8

Spare Parts

8-1. Notes on Repair Parts

1. Safety Related Components Warning

WARNING

Components marked \triangle are critical to safe operation. Therefore, specified parts should be used in the case of replacement.

2. Standardization of Parts

Some repair parts supplied by Sony differ from those used for the unit. These are because of parts commonality and improvement.

Parts list has the present standardized repair parts.

3. Stock of Parts

Parts marked with "o" at SP (Supply Code) column of the spare parts list may not be stocked. Therefore, the delivery date will be delayed.

4. Harness

Harnesses with no part number are not registered as spare parts.

In need of repair, get components shown in the list and repair using them.

8-1. 補修部品注意事項

1. 安全重要部品

\triangle 警告

\triangle 印のついた部品は安全性を維持するために重要な部品です。したがって、交換する時は必ず指定の部品を使ってください。

2. 部品の共通化

ソニーから供給する補修用部品は、セットに使われているものと異なることがあります。

これは部品の共通化、改良等によるものです。

部品表には現時点での共通化された補修用部品が記載されています。

3. 部品の在庫

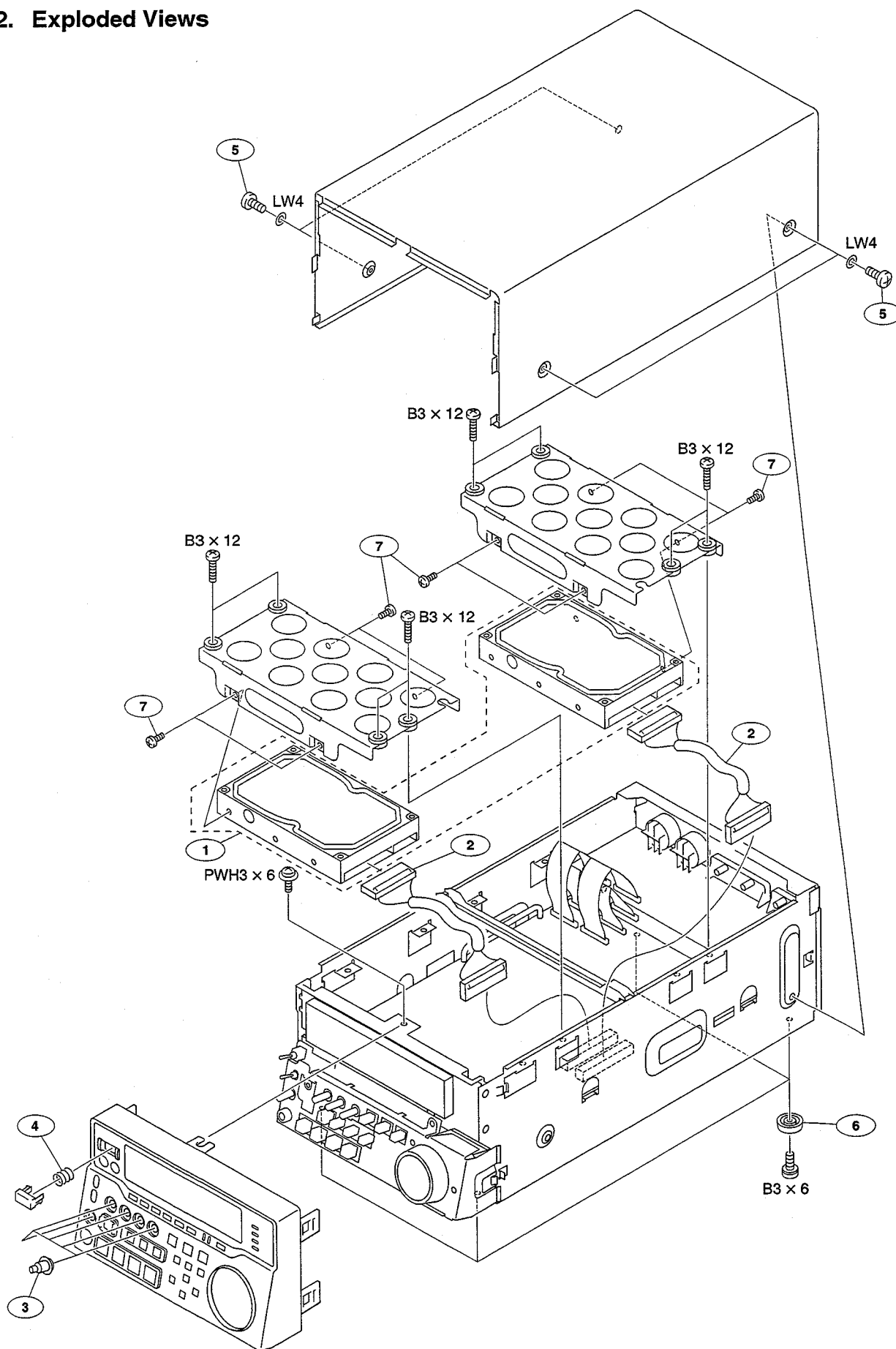
部品表のSP (Supply code) 欄に "o" で示される部品は在庫していないことがあり、納期が長くなることがあります。

4. ハーネス

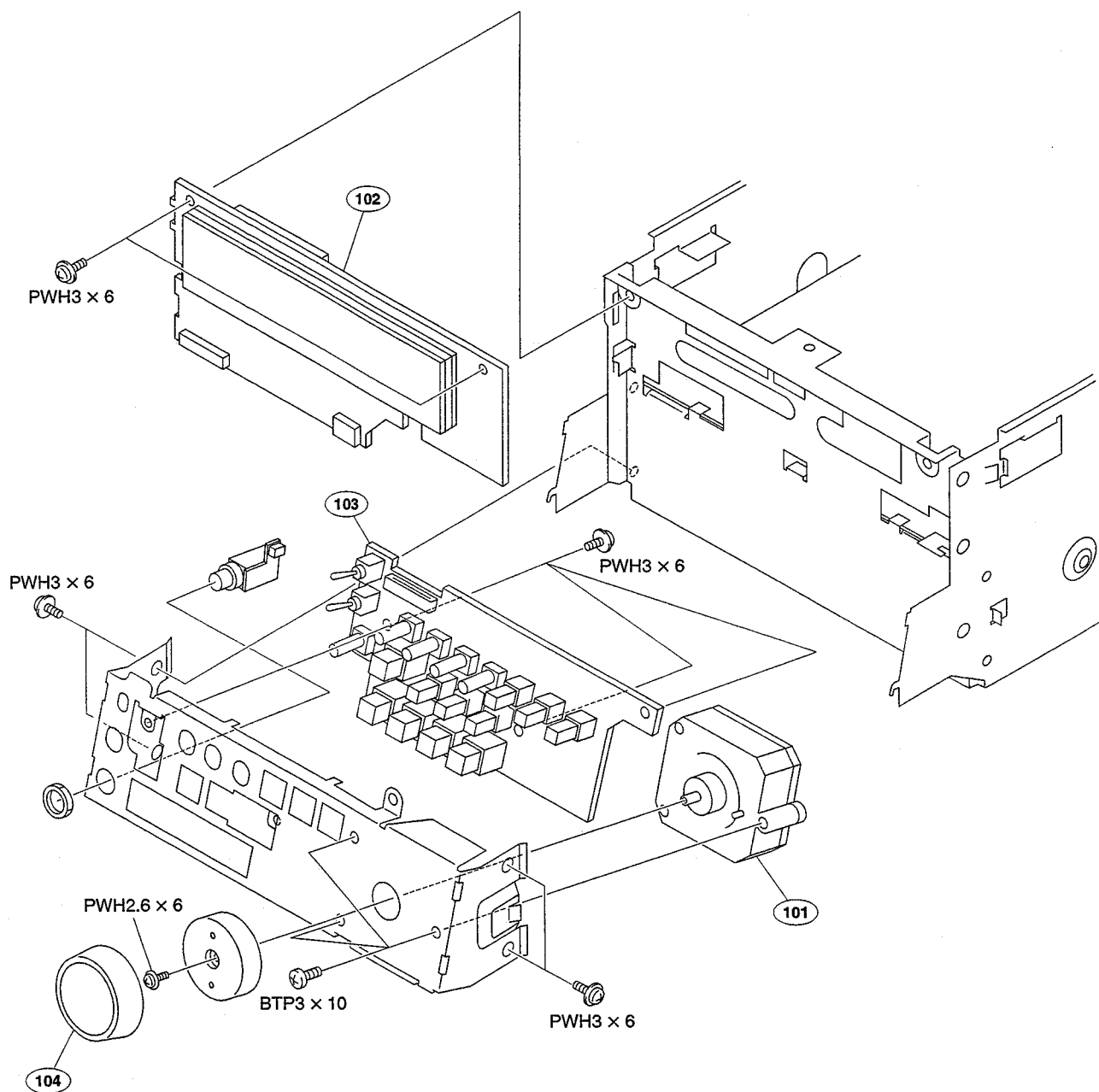
部品番号が記載されていないハーネスは、サービス部品として登録されていません。

これらは、リストに展開されているコンポーネント部品で補修してください。

8-2. Exploded Views



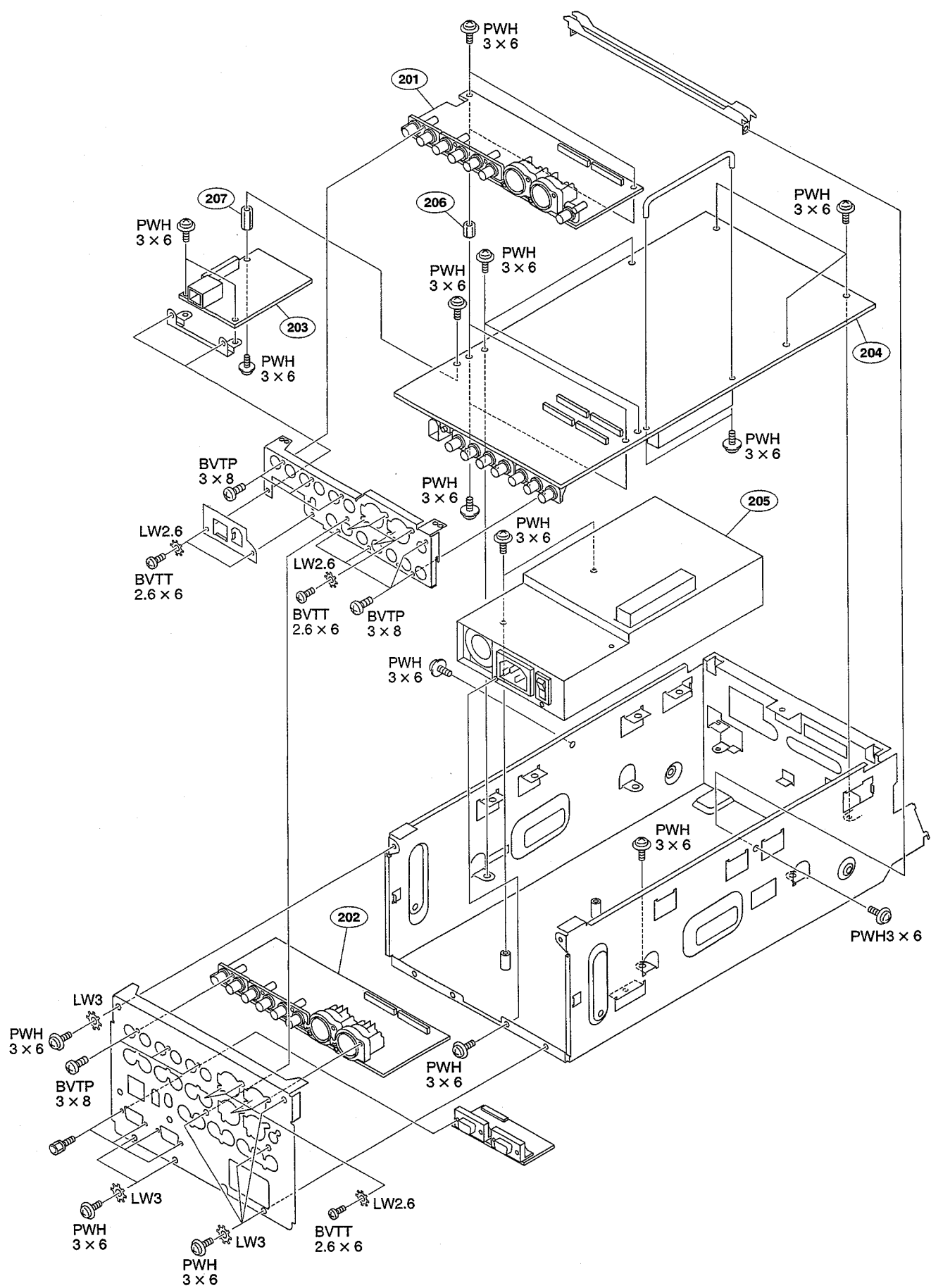
No.	Part No	SP Description
1	A-8346-556-A	s HDD SERVICE KIT
2	1-824-899-11	s CABLE, IDE
3	3-628-917-03	o KNOB1
4	3-704-720-01	s SPRING, COMPRESSION
5	3-733-690-01	s SCREW +B 4X6 (ST)
6	4-043-045-01	s FOOT (RBR)
7	4-612-633-01	s SCREW, HD FITTING (STEEL)
	7-623-423-07	s WASHER LW 4 (TYPE B)
	7-682-547-04	s SCREW +B3X6
	7-682-550-04	s SCREW +B3X12 (EP-FE/CU, NI, CR)
	7-682-903-11	s SCREW +PWH 3X6



No.	Part No	SP Description
101	A-8323-665-C	s DIAL ASSY, SEARCH
102	1-477-647-11	s VFD ASSY
103	A-8345-411-A	s MOUNTED CIRCUIT BOARD, KY-536
104	3-704-712-01	s COVER,DIAL

7-682-902-21	s SCREW +PWH 2.6X6
7-682-903-11	s SCREW +PWH 3X6
7-685-547-19	s SCREW +BTP 3X10 (EP-FE/ZNBK/CM2)

Power supply and Boards



No.	Part No	SP Description
201	A-8345-399-A s	MOUNTED CIRCUIT BOARD, DDE-18 (for except Japan)
	A-8345-401-A s	MOUNTED CIRCUIT BOARD, DDE-18A (for Japan)
202	A-8345-403-A s	MOUNTED CIRCUIT BOARD, DEN-20 (for except Japan)
	A-8345-405-A s	MOUNTED CIRCUIT BOARD, DEN-20A (for Japan)
203	A-8345-407-A s	MOUNTED CIRCUIT BOARD, DIF-140
204	A-8345-409-A s	MOUNTED CIRCUIT BOARD, DRP-224
205	△ 1-468-735-11 s	SWITCHING REGULATOR
206	2-280-622-11 s	SUPPORT (M3), HEXAGON
207	2-280-622-41 s	SUPPORT (M3), HEXAGON

7-623-421-07 s WASHER LW 2.6 (TYPE B)
 7-623-422-07 s WASHER LW 3 (TYPE 3)
 7-682-903-11 s SCREW +PWH 3X6
 7-685-646-79 s SCREW +BVTP 3X8
 7-685-862-09 s SCREW, +BVTP 2.6X6 (EP-FE/ZNBK/C)

8-3. Electrical Parts List

DDE-18/18A BOARD

*J: [for Japan]
*E: [for except Japan]

Ref. No. or Q'ty	Part No.	SP Description
1pc	*E A-8345-399-A	s MOUNTED CIRCUIT BOARD, DDE-18
1pc	*J A-8345-401-A	s MOUNTED CIRCUIT BOARD, DDE-18A
C1	1-164-227-11	s CAPACITOR, CERAMIC 0.022MF/25V
C2	1-164-227-11	s CAPACITOR, CERAMIC 0.022MF/25V
C3	1-164-227-11	s CAPACITOR, CERAMIC 0.022MF/25V
C4	1-164-227-11	s CAPACITOR, CERAMIC 0.022MF/25V
C5	1-164-227-11	s CAPACITOR, CERAMIC 0.022MF/25V
C6	1-131-661-11	s CAPACITOR, ELECT 100MF/10V CHIP
C7	1-131-661-11	s CAPACITOR, ELECT 100MF/10V CHIP
C8	1-131-661-11	s CAPACITOR, ELECT 100MF/10V CHIP
C9	1-164-227-11	s CAPACITOR, CERAMIC 0.022MF/25V
C10	1-164-227-11	s CAPACITOR, CERAMIC 0.022MF/25V
C11	1-164-227-11	s CAPACITOR, CERAMIC 0.022MF/25V
C12	1-164-227-11	s CAPACITOR, CERAMIC 0.022MF/25V
C13	1-164-227-11	s CAPACITOR, CERAMIC 0.022MF/25V
C14	1-131-661-11	s CAPACITOR, ELECT 100MF/10V CHIP
C15	1-131-661-11	s CAPACITOR, ELECT 100MF/10V CHIP
C16	1-164-227-11	s CAPACITOR, CERAMIC 0.022MF/25V
C17	1-164-227-11	s CAPACITOR, CERAMIC 0.022MF/25V
C100	1-107-826-11	s CAPACITOR, CHIP CERAMIC 0.1MF
C101	1-107-826-11	s CAPACITOR, CHIP CERAMIC 0.1MF
C102	1-164-230-11	s CAPACITOR, CERAMIC 220PF/50V
C103	1-164-230-11	s CAPACITOR, CERAMIC 220PF/50V
C104	1-164-230-11	s CAPACITOR, CERAMIC 220PF/50V
C105	1-162-919-11	s CAPACITOR, CERAMIC 22PF/50V CH
C106	1-162-919-11	s CAPACITOR, CERAMIC 22PF/50V CH
C107	1-162-919-11	s CAPACITOR, CERAMIC 22PF/50V CH
C108	1-164-230-11	s CAPACITOR, CERAMIC 220PF/50V
C109	1-164-230-11	s CAPACITOR, CERAMIC 220PF/50V
C110	1-164-230-11	s CAPACITOR, CERAMIC 220PF/50V
C111	1-107-826-11	s CAPACITOR, CHIP CERAMIC 0.1MF
C112	1-107-826-11	s CAPACITOR, CHIP CERAMIC 0.1MF
C113	1-107-826-11	s CAPACITOR, CHIP CERAMIC 0.1MF
C114	1-107-826-11	s CAPACITOR, CHIP CERAMIC 0.1MF
C115	1-107-826-11	s CAPACITOR, CHIP CERAMIC 0.1MF
C116	1-107-826-11	s CAPACITOR, CHIP CERAMIC 0.1MF
C117	1-107-826-11	s CAPACITOR, CHIP CERAMIC 0.1MF
C118	1-107-826-11	s CAPACITOR, CHIP CERAMIC 0.1MF
C119	1-107-826-11	s CAPACITOR, CHIP CERAMIC 0.1MF
C120	1-107-826-11	s CAPACITOR, CHIP CERAMIC 0.1MF
C121	1-107-826-11	s CAPACITOR, CHIP CERAMIC 0.1MF
C122	1-107-826-11	s CAPACITOR, CHIP CERAMIC 0.1MF
C123	1-128-694-11	s CAP, CHIP TANTALUM ELECT 22MF
C124	1-107-826-11	s CAPACITOR, CHIP CERAMIC 0.1MF
C125	1-107-826-11	s CAPACITOR, CHIP CERAMIC 0.1MF
C126	1-125-837-11	s CAPACITOR, CHIP CERAMIC1MF/6.3V
C127	1-127-760-11	s CAPACITOR, CERAMIC 4.7MF/6.3V
C128	1-127-760-11	s CAPACITOR, CERAMIC 4.7MF/6.3V
C129	1-125-837-11	s CAPACITOR, CHIP CERAMIC1MF/6.3V
C130	1-107-826-11	s CAPACITOR, CHIP CERAMIC 0.1MF
C131	1-107-826-11	s CAPACITOR, CHIP CERAMIC 0.1MF
C132	1-128-694-11	s CAP, CHIP TANTALUM ELECT 22MF
C133	1-107-826-11	s CAPACITOR, CHIP CERAMIC 0.1MF
C134	1-107-826-11	s CAPACITOR, CHIP CERAMIC 0.1MF
C135	1-162-915-11	s CAPACITOR, CERAMIC 10PF/50V CH

(DDE-18/18A BOARD)

Ref. No. or Q'ty	Part No.	SP Description
C136	1-162-915-11	s CAPACITOR, CERAMIC 10PF/50V CH
C137	1-107-826-11	s CAPACITOR, CHIP CERAMIC 0.1MF
C138	1-107-826-11	s CAPACITOR, CHIP CERAMIC 0.1MF
C139	1-107-826-11	s CAPACITOR, CHIP CERAMIC 0.1MF
C140	1-107-826-11	s CAPACITOR, CHIP CERAMIC 0.1MF
C141	1-107-826-11	s CAPACITOR, CHIP CERAMIC 0.1MF
C142	1-164-230-11	s CAPACITOR, CERAMIC 220PF/50V
C145	1-162-919-11	s CAPACITOR, CERAMIC 22PF/50V CH
C148	1-164-230-11	s CAPACITOR, CERAMIC 220PF/50V
C151	1-107-826-11	s CAPACITOR, CHIP CERAMIC 0.1MF
C152	1-107-826-11	s CAPACITOR, CHIP CERAMIC 0.1MF
C157	1-107-826-11	s CAPACITOR, CHIP CERAMIC 0.1MF
C158	1-107-826-11	s CAPACITOR, CHIP CERAMIC 0.1MF
C159	1-107-826-11	s CAPACITOR, CHIP CERAMIC 0.1MF
C160	1-107-826-11	s CAPACITOR, CHIP CERAMIC 0.1MF
C161	1-107-826-11	s CAPACITOR, CHIP CERAMIC 0.1MF
C162	1-107-826-11	s CAPACITOR, CHIP CERAMIC 0.1MF
C163	1-128-694-11	s CAP, CHIP TANTALUM ELECT 22MF
C164	1-107-826-11	s CAPACITOR, CHIP CERAMIC 0.1MF
C165	1-107-826-11	s CAPACITOR, CHIP CERAMIC 0.1MF
C166	1-125-837-11	s CAPACITOR, CHIP CERAMIC1MF/6.3V
C167	1-127-760-11	s CAPACITOR, CERAMIC 4.7MF/6.3V
C168	1-127-760-11	s CAPACITOR, CERAMIC 4.7MF/6.3V
C169	1-125-837-11	s CAPACITOR, CHIP CERAMIC1MF/6.3V
C170	1-107-826-11	s CAPACITOR, CHIP CERAMIC 0.1MF
C171	1-107-826-11	s CAPACITOR, CHIP CERAMIC 0.1MF
C172	1-128-694-11	s CAP, CHIP TANTALUM ELECT 22MF
C173	1-107-826-11	s CAPACITOR, CHIP CERAMIC 0.1MF
C174	1-107-826-11	s CAPACITOR, CHIP CERAMIC 0.1MF
C175	1-162-915-11	s CAPACITOR, CERAMIC 10PF/50V CH
C176	1-162-915-11	s CAPACITOR, CERAMIC 10PF/50V CH
C177	1-107-826-11	s CAPACITOR, CHIP CERAMIC 0.1MF
C178	1-107-826-11	s CAPACITOR, CHIP CERAMIC 0.1MF
C179	1-107-826-11	s CAPACITOR, CHIP CERAMIC 0.1MF
C200	1-164-315-11	s CAPACITOR, CERAMIC 470PF/50V CH
C201	1-164-315-11	s CAPACITOR, CERAMIC 470PF/50V CH
C202	1-164-315-11	s CAPACITOR, CERAMIC 470PF/50V CH
C203	1-164-315-11	s CAPACITOR, CERAMIC 470PF/50V CH
C204	1-164-315-11	s CAPACITOR, CERAMIC 470PF/50V CH
C205	1-164-315-11	s CAPACITOR, CERAMIC 470PF/50V CH
C206	1-164-315-11	s CAPACITOR, CERAMIC 470PF/50V CH
C207	1-164-315-11	s CAPACITOR, CERAMIC 470PF/50V CH
C208	1-126-405-11	s CAPACITOR, ELECT 10MF/50V(CHIP)
C209	1-126-405-11	s CAPACITOR, ELECT 10MF/50V(CHIP)
C210	1-126-405-11	s CAPACITOR, ELECT 10MF/50V(CHIP)
C211	1-126-405-11	s CAPACITOR, ELECT 10MF/50V(CHIP)
C212	1-164-227-11	s CAPACITOR, CERAMIC 0.022MF/25V
C213	1-164-227-11	s CAPACITOR, CERAMIC 0.022MF/25V
C214	1-126-396-11	s CAPACITOR, ELECT 47MF/16V(CHIP)
C215	1-126-396-11	s CAPACITOR, ELECT 47MF/16V(CHIP)
C216	1-162-923-11	s CAPACITOR, CERAMIC 47PF/50V CH
C217	1-162-923-11	s CAPACITOR, CERAMIC 47PF/50V CH
C218	1-162-923-11	s CAPACITOR, CERAMIC 47PF/50V CH
C219	1-162-923-11	s CAPACITOR, CERAMIC 47PF/50V CH
C220	1-126-396-11	s CAPACITOR, ELECT 47MF/16V(CHIP)
C221	1-126-396-11	s CAPACITOR, ELECT 47MF/16V(CHIP)
C300	1-126-395-11	s CAPACITOR, ELECT 22MF/16V(CHIP)
C301	1-126-395-11	s CAPACITOR, ELECT 22MF/16V(CHIP)
C302	1-126-395-11	s CAPACITOR, ELECT 22MF/16V(CHIP)

(DDE-18/18A BOARD)

Ref. No. or Q'ty	Part No.	SP Description
C303	1-126-395-11	s CAPACITOR, ELECT 22MF/16V (CHIP)
C304	1-162-923-11	s CAPACITOR, CERAMIC 47PF/50V CH
C305	1-162-923-11	s CAPACITOR, CERAMIC 47PF/50V CH
C306	1-162-923-11	s CAPACITOR, CERAMIC 47PF/50V CH
C307	1-162-923-11	s CAPACITOR, CERAMIC 47PF/50V CH
C308	1-164-227-11	s CAPACITOR, CERAMIC 0.022MF/25V
C309	1-162-923-11	s CAPACITOR, CERAMIC 47PF/50V CH
C310	1-162-923-11	s CAPACITOR, CERAMIC 47PF/50V CH
C311	1-162-927-11	s CAPACITOR, CERAMIC 100PF/50V CH
C312	1-162-927-11	s CAPACITOR, CERAMIC 100PF/50V CH
C313	1-107-826-11	s CAPACITOR, CHIP CERAMIC 0.1MF
C314	1-107-826-11	s CAPACITOR, CHIP CERAMIC 0.1MF
C315	1-107-826-11	s CAPACITOR, CHIP CERAMIC 0.1MF
C316	1-107-826-11	s CAPACITOR, CHIP CERAMIC 0.1MF
C317	1-104-851-11	s CAPACITOR, TANTALUM 10MF/10V
C318	1-104-851-11	s CAPACITOR, TANTALUM 10MF/10V
C319	1-126-394-11	s CAPACITOR, ELECT 10MF/16V (CHIP)
C320	1-126-394-11	s CAPACITOR, ELECT 10MF/16V (CHIP)
C321	1-126-394-11	s CAPACITOR, ELECT 10MF/16V (CHIP)
C322	1-126-394-11	s CAPACITOR, ELECT 10MF/16V (CHIP)
C323	1-162-965-11	s CAPACITOR, CERAMIC 1500PF/50V B
C324	1-162-965-11	s CAPACITOR, CERAMIC 1500PF/50V B
C325	1-107-826-11	s CAPACITOR, CHIP CERAMIC 0.1MF
C326	1-104-851-11	s CAPACITOR, TANTALUM 10MF/10V
C327	1-107-826-11	s CAPACITOR, CHIP CERAMIC 0.1MF
C328	1-107-826-11	s CAPACITOR, CHIP CERAMIC 0.1MF
C329	1-162-966-11	s CAPACITOR, CERAMIC 2200PF/50V B
C330	1-107-826-11	s CAPACITOR, CHIP CERAMIC 0.1MF
C331	1-104-851-11	s CAPACITOR, TANTALUM 10MF/10V
C332	1-104-851-11	s CAPACITOR, TANTALUM 10MF/10V
C333	1-107-826-11	s CAPACITOR, CHIP CERAMIC 0.1MF
C334	1-162-966-11	s CAPACITOR, CERAMIC 2200PF/50V B
C335	1-164-227-11	s CAPACITOR, CERAMIC 0.022MF/25V
C336	1-162-923-11	s CAPACITOR, CERAMIC 47PF/50V CH
C337	1-162-923-11	s CAPACITOR, CERAMIC 47PF/50V CH
CN1	1-794-872-11	o CONNECTOR, BNC 2P
CN2	1-794-874-11	o CONNECTOR, BNC 4P
CN3	*E 1-793-986-11	o CONNECTOR (RECEPTACLE)
CN4	*E 1-793-986-11	o CONNECTOR (RECEPTACLE)
CN5	*J 1-793-985-21	o CONNECTOR (PLUG)
CN6	*J 1-793-985-21	o CONNECTOR (PLUG)
CN100	1-766-431-21	o HOUSING, CONNECTOR 30P
CN101	1-766-431-21	o HOUSING, CONNECTOR 30P
D200	8-719-820-41	s DIODE 1SS302
D201	8-719-820-41	s DIODE 1SS302
D202	8-719-820-41	s DIODE 1SS302
D203	8-719-820-41	s DIODE 1SS302
D300	8-719-024-81	s DIODE 1SS300-TE85L
D301	8-719-024-81	s DIODE 1SS300-TE85L
FL100	1-239-896-12	s FILTER, EMI (SMD)
FL101	1-239-896-12	s FILTER, EMI (SMD)
FL102	1-239-896-12	s FILTER, EMI (SMD)
FL103	1-239-896-12	s FILTER, EMI (SMD)
IC1	8-759-442-54	s IC RH5RL50AA-T1
IC2	8-759-460-72	s IC BA033FP
IC3	8-759-180-19	s IC NJU7211U50-TE1
IC4	8-759-442-54	s IC RH5RL50AA-T1
IC5	8-759-180-19	s IC NJU7211U50-TE1

(DDE-18/18A BOARD)

Ref. No. or Q'ty	Part No.	SP Description
IC100	6-703-417-01	s IC TVP5145PFP
IC101	6-702-231-01	s IC LMH6642MFX
IC102	6-702-231-01	s IC LMH6642MFX
IC103	6-702-231-01	s IC LMH6642MFX
IC104	6-702-231-01	s IC LMH6642MFX
IC105	6-703-417-01	s IC TVP5145PFP
IC106	6-702-231-01	s IC LMH6642MFX
IC107	6-702-231-01	s IC LMH6642MFX
IC200	8-759-833-99	s IC MC74HC4052ADTR2
IC201	8-759-833-99	s IC MC74HC4052ADTR2
IC202	8-759-422-21	s IC NJM4580VTE2
IC203	8-759-422-21	s IC NJM4580VTE2
IC204	8-759-490-41	s IC TC74VHC7541AFT (EL)
IC300	8-759-570-08	s IC TC7SET32FU (TE85R)
IC301	8-759-570-08	s IC TC7SET32FU (TE85R)
IC302	8-759-394-76	s IC NJM2068M-D (TE2)
IC303	8-759-394-76	s IC NJM2068M-D (TE2)
IC304	8-759-833-99	s IC MC74HC4052ADTR2
IC305	8-759-833-99	s IC MC74HC4052ADTR2
IC306	8-759-422-21	s IC NJM4580VTE2
IC307	8-759-422-21	s IC NJM4580VTE2
IC308	8-759-462-08	s IC AK5352-VF (E2)
IC309	8-759-196-97	s IC TC7SH32FU (TE85R)
L100	1-412-982-21	s INDUCTOR (SMALL TYPE)
L101	1-412-982-21	s INDUCTOR (SMALL TYPE)
L102	1-412-982-21	s INDUCTOR (SMALL TYPE)
L103	1-414-398-11	s INDUCTOR (SMD) 10UH
L104	1-414-398-11	s INDUCTOR (SMD) 10UH
L105	1-412-982-21	s INDUCTOR (SMALL TYPE)
L106	1-414-398-11	s INDUCTOR (SMD) 10UH
L107	1-414-398-11	s INDUCTOR (SMD) 10UH
L200	1-410-380-31	s INDUCTOR, CHIP 8.2UH (3225)
L201	1-410-380-31	s INDUCTOR, CHIP 8.2UH (3225)
L202	1-410-380-31	s INDUCTOR, CHIP 8.2UH (3225)
L203	1-410-380-31	s INDUCTOR, CHIP 8.2UH (3225)
PS1	Δ 1-533-282-21	s CIRCUIT PROTECTOR 2A (3225)
PS2	Δ 1-533-282-21	s CIRCUIT PROTECTOR 2A (3225)
PS3	Δ 1-533-282-21	s CIRCUIT PROTECTOR 2A (3225)
PS4	Δ 1-533-282-21	s CIRCUIT PROTECTOR 2A (3225)
PS5	Δ 1-533-282-21	s CIRCUIT PROTECTOR 2A (3225)
Q100	8-729-140-63	s TRANSISTOR 2SA1611-M5M6
Q200	8-729-020-93	s TRANSISTOR 2SC2982C-TE12L
Q201	8-729-106-60	s TRANSISTOR 2SB1115A
R100	1-211-990-11	s RESISTOR, CHIP 75 1/10W (1608)
R101	1-211-990-11	s RESISTOR, CHIP 75 1/10W (1608)
R102	1-218-857-11	s RESISTOR, CHIP 2.7K 1/10W (1608)
R103	1-218-855-11	s RESISTOR, CHIP 2.2K 1/10W (1608)
R104	1-216-801-11	s RESISTOR, CHIP 22 1/10W (1608)
R105	1-218-853-11	s RESISTOR, CHIP 1.8K 1/10W (1608)
R106	1-211-990-11	s RESISTOR, CHIP 75 1/10W (1608)
R107	1-211-990-11	s RESISTOR, CHIP 75 1/10W (1608)
R108	1-211-990-11	s RESISTOR, CHIP 75 1/10W (1608)
R109	1-211-990-11	s RESISTOR, CHIP 75 1/10W (1608)
R110	1-211-991-11	s RESISTOR, CHIP 82 1/10W (1608)
R111	1-211-991-11	s RESISTOR, CHIP 82 1/10W (1608)
R112	1-211-991-11	s RESISTOR, CHIP 82 1/10W (1608)
R113	1-218-839-11	s RESISTOR, CHIP 470 1/10W (1608)
R114	1-218-839-11	s RESISTOR, CHIP 470 1/10W (1608)

(DDE-18/18A BOARD)

Ref. No. or Q'ty	Part No.	SP Description
R115	1-218-839-11	s RESISTOR,CHIP 470 1/10W (1608)
R116	1-218-871-11	s RESISTOR,CHIP 10K 1/10W (1608)
R117	1-218-895-11	s RESISTOR,CHIP 100K 1/10W(1608)
R119	1-216-801-11	s RESISTOR,CHIP 22 1/10W (1608)
R120	1-218-871-11	s RESISTOR,CHIP 10K 1/10W (1608)
R121	1-216-801-11	s RESISTOR,CHIP 22 1/10W (1608)
R122	1-218-895-11	s RESISTOR,CHIP 100K 1/10W(1608)
R123	1-218-871-11	s RESISTOR,CHIP 10K 1/10W (1608)
R124	1-218-871-11	s RESISTOR,CHIP 10K 1/10W (1608)
R125	1-218-871-11	s RESISTOR,CHIP 10K 1/10W (1608)
R126	1-218-871-11	s RESISTOR,CHIP 10K 1/10W (1608)
R127	1-216-801-11	s RESISTOR,CHIP 22 1/10W (1608)
R128	1-218-871-11	s RESISTOR,CHIP 10K 1/10W (1608)
R129	1-216-857-11	s RESISTOR,CHIP 1M 1/10W(1608)
R130	1-216-801-11	s RESISTOR,CHIP 22 1/10W (1608)
R131	1-216-801-11	s RESISTOR,CHIP 22 1/10W (1608)
R132	1-216-801-11	s RESISTOR,CHIP 22 1/10W (1608)
R133	1-216-801-11	s RESISTOR,CHIP 22 1/10W (1608)
R134	1-216-801-11	s RESISTOR,CHIP 22 1/10W (1608)
R135	1-218-823-11	s RESISTOR,CHIP 100 1/10W (1608)
R136	1-216-864-11	s CONDUCTOR, CHIP (1608)
R139	1-216-864-11	s CONDUCTOR, CHIP (1608)
R140	1-216-864-11	s CONDUCTOR, CHIP (1608)
R143	1-218-855-11	s RESISTOR,CHIP 2.2K 1/10W(1608)
R145	1-218-853-11	s RESISTOR,CHIP 1.8K 1/10W(1608)
R146	1-211-990-11	s RESISTOR,CHIP 75 1/10W (1608)
R147	1-211-990-11	s RESISTOR,CHIP 75 1/10W (1608)
R150	1-211-991-11	s RESISTOR,CHIP 82 1/10W (1608)
R153	1-218-839-11	s RESISTOR,CHIP 470 1/10W (1608)
R156	1-218-871-11	s RESISTOR,CHIP 10K 1/10W (1608)
R158	1-218-871-11	s RESISTOR,CHIP 10K 1/10W (1608)
R159	1-216-801-11	s RESISTOR,CHIP 22 1/10W (1608)
R163	1-218-871-11	s RESISTOR,CHIP 10K 1/10W (1608)
R164	1-218-871-11	s RESISTOR,CHIP 10K 1/10W (1608)
R165	1-218-871-11	s RESISTOR,CHIP 10K 1/10W (1608)
R166	1-218-871-11	s RESISTOR,CHIP 10K 1/10W (1608)
R167	1-218-871-11	s RESISTOR,CHIP 10K 1/10W (1608)
R169	1-216-857-11	s RESISTOR,CHIP 1M 1/10W(1608)
R200	*J 1-216-864-11	s CONDUCTOR, CHIP (1608)
R201	*J 1-216-864-11	s CONDUCTOR, CHIP (1608)
R202	*E 1-216-864-11	s CONDUCTOR, CHIP (1608)
R203	*E 1-216-864-11	s CONDUCTOR, CHIP (1608)
R204	*J 1-216-864-11	s CONDUCTOR, CHIP (1608)
R205	*E 1-216-864-11	s CONDUCTOR, CHIP (1608)
R206	*J 1-216-864-11	s CONDUCTOR, CHIP (1608)
R207	*E 1-216-864-11	s CONDUCTOR, CHIP (1608)
R208	1-218-872-11	s RESISTOR,CHIP 11K 1/10W (1608)
R209	1-218-858-11	s RESISTOR, CHIP 3K 1/10W (1608)
R210	1-218-864-11	s RESISTOR,CHIP 5.1K 1/10W(1608)
R211	1-218-872-11	s RESISTOR,CHIP 11K 1/10W (1608)
R212	1-218-858-11	s RESISTOR, CHIP 3K 1/10W (1608)
R213	1-218-864-11	s RESISTOR,CHIP 5.1K 1/10W(1608)
R214	1-218-831-11	s RESISTOR, CHIP 220 1/10W(1608)
R215	1-218-831-11	s RESISTOR, CHIP 220 1/10W(1608)
R216	1-218-867-11	s RESISTOR,CHIP 6.8K 1/10W(1608)
R217	1-218-867-11	s RESISTOR,CHIP 6.8K 1/10W(1608)
R218	1-218-867-11	s RESISTOR,CHIP 6.8K 1/10W(1608)
R219	1-218-867-11	s RESISTOR,CHIP 6.8K 1/10W(1608)
R220	1-218-834-11	s RESISTOR,CHIP 300 1/10W (1608)

(DDE-18/18A BOARD)

Ref. No. or Q'ty	Part No.	SP Description
R221	1-218-834-11	s RESISTOR,CHIP 300 1/10W (1608)
R222	1-218-834-11	s RESISTOR,CHIP 300 1/10W (1608)
R223	1-218-834-11	s RESISTOR,CHIP 300 1/10W (1608)
R224	1-218-895-11	s RESISTOR,CHIP 100K 1/10W(1608)
R225	1-218-895-11	s RESISTOR,CHIP 100K 1/10W(1608)
R226	1-218-861-11	s RESISTOR,CHIP 3.9K 1/10W(1608)
R227	1-218-861-11	s RESISTOR,CHIP 3.9K 1/10W(1608)
R228	1-218-883-11	s RESISTOR,CHIP 33K 1/10W (1608)
R229	1-218-883-11	s RESISTOR,CHIP 33K 1/10W (1608)
R230	1-218-883-11	s RESISTOR,CHIP 33K 1/10W (1608)
R231	1-218-883-11	s RESISTOR,CHIP 33K 1/10W (1608)
R234	1-218-859-11	s RESISTOR,CHIP 3.3K 1/10W(1608)
R235	1-218-859-11	s RESISTOR,CHIP 3.3K 1/10W(1608)
R236	1-218-859-11	s RESISTOR,CHIP 3.3K 1/10W(1608)
R237	1-218-859-11	s RESISTOR,CHIP 3.3K 1/10W(1608)
R238	1-218-849-11	s RESISTOR,CHIP 1.2K 1/10W(1608)
R239	1-218-849-11	s RESISTOR,CHIP 1.2K 1/10W(1608)
R300	1-218-895-11	s RESISTOR,CHIP 100K 1/10W(1608)
R301	1-218-895-11	s RESISTOR,CHIP 100K 1/10W(1608)
R302	1-218-895-11	s RESISTOR,CHIP 100K 1/10W(1608)
R303	1-218-863-11	s RESISTOR,CHIP 4.7K 1/10W(1608)
R304	1-218-863-11	s RESISTOR,CHIP 4.7K 1/10W(1608)
R305	1-218-863-11	s RESISTOR,CHIP 4.7K 1/10W(1608)
R306	1-218-863-11	s RESISTOR,CHIP 4.7K 1/10W(1608)
R307	1-218-863-11	s RESISTOR,CHIP 4.7K 1/10W(1608)
R308	1-218-863-11	s RESISTOR,CHIP 4.7K 1/10W(1608)
R309	1-218-863-11	s RESISTOR,CHIP 4.7K 1/10W(1608)
R310	1-218-863-11	s RESISTOR,CHIP 4.7K 1/10W(1608)
R311	1-218-843-11	s RESISTOR,CHIP 680 1/10W (1608)
R312	1-218-843-11	s RESISTOR,CHIP 680 1/10W (1608)
R313	1-218-857-11	s RESISTOR,CHIP 2.7K 1/10W(1608)
R314	1-218-857-11	s RESISTOR,CHIP 2.7K 1/10W(1608)
R315	1-218-875-11	s RESISTOR,CHIP 15K 1/10W (1608)
R316	1-218-875-11	s RESISTOR,CHIP 15K 1/10W (1608)
R317	1-218-868-11	s RESISTOR,CHIP 7.5K 1/10W(1608)
R318	1-218-872-11	s RESISTOR,CHIP 11K 1/10W (1608)
R319	1-218-875-11	s RESISTOR,CHIP 15K 1/10W (1608)
R320	1-218-875-11	s RESISTOR,CHIP 15K 1/10W (1608)
R321	1-218-868-11	s RESISTOR,CHIP 7.5K 1/10W(1608)
R322	1-218-872-11	s RESISTOR,CHIP 11K 1/10W (1608)
R323	1-218-861-11	s RESISTOR,CHIP 3.9K 1/10W(1608)
R324	1-218-846-11	s RESISTOR,CHIP 910 1/10W (1608)
R325	1-218-861-11	s RESISTOR,CHIP 3.9K 1/10W(1608)
R326	1-218-846-11	s RESISTOR,CHIP 910 1/10W (1608)
R327	1-218-871-11	s RESISTOR,CHIP 10K 1/10W (1608)
R328	1-218-871-11	s RESISTOR,CHIP 10K 1/10W (1608)
R329	1-218-871-11	s RESISTOR,CHIP 10K 1/10W (1608)
R330	1-218-871-11	s RESISTOR,CHIP 10K 1/10W (1608)
R331	1-218-871-11	s RESISTOR,CHIP 10K 1/10W (1608)
R332	1-218-871-11	s RESISTOR,CHIP 10K 1/10W (1608)
R333	1-218-882-11	s RESISTOR, CHIP 30K 1/10W(1608)
R334	1-218-882-11	s RESISTOR, CHIP 30K 1/10W(1608)
R335	1-218-887-11	s RESISTOR,CHIP 47K 1/10W (1608)
R336	1-218-887-11	s RESISTOR,CHIP 47K 1/10W (1608)
R337	1-218-887-11	s RESISTOR,CHIP 47K 1/10W (1608)
R338	1-218-887-11	s RESISTOR,CHIP 47K 1/10W (1608)
R339	1-218-887-11	s RESISTOR,CHIP 47K 1/10W (1608)
R340	1-218-887-11	s RESISTOR,CHIP 47K 1/10W (1608)
R341	1-218-823-11	s RESISTOR,CHIP 100 1/10W (1608)

(DDE-18/18A BOARD)

Ref. No. or Q'ty	Part No.	SP Description
R342	1-218-823-11	s RESISTOR,CHIP 100 1/10W (1608)
R343	1-218-823-11	s RESISTOR,CHIP 100 1/10W (1608)
R344	1-218-823-11	s RESISTOR,CHIP 100 1/10W (1608)
R345	1-211-969-11	s RESISTOR,CHIP 10 1/10W (1608)
R346	1-216-801-11	s RESISTOR,CHIP 22 1/10W (1608)
R347	1-218-839-11	s RESISTOR,CHIP 470 1/10W (1608)
R348	1-216-864-11	s CONDUCTOR, CHIP (1608)
R349	1-218-839-11	s RESISTOR,CHIP 470 1/10W (1608)
R350	1-216-864-11	s CONDUCTOR, CHIP (1608)
RB100	1-233-575-11	s RES, CHIP NETWORK 22
RB101	1-233-575-11	s RES, CHIP NETWORK 22
RB200	1-233-810-21	s RES, NETWORK 100K (3216)
RB300	1-233-810-21	s RES, NETWORK 100K (3216)
RB301	1-233-575-11	s RES, CHIP NETWORK 22
X100	1-767-190-11	s VIBRATOR, CRYSTAL
X101	1-767-190-11	s VIBRATOR, CRYSTAL

DEN-20/20A BOARD

*J: [for Japan]
*E: [for except Japan]

Ref. No. or Q'ty	Part No.	SP Description
1pc	*E A-8345-403-A	s MOUNTED CIRCUIT BOARD, DEN-20
1pc	*J A-8345-405-A	s MOUNTED CIRCUIT BOARD, DEN-20A
C100	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C101	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C102	1-137-740-91	s CAP, TANTALUM ELECT 47MF(3528)
C103	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C104	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C105	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C106	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C107	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C108	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C109	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C110	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C111	1-164-230-11	s CAPACITOR,CERAMIC 220PF/50V
C112	1-104-852-11	s CAPACITOR,TANTALUM 22MF/10V
C113	1-104-852-11	s CAPACITOR,TANTALUM 22MF/10V
C114	1-115-414-11	s CAPACITOR,CHIP CERAMIC 820PF
C115	1-115-414-11	s CAPACITOR,CHIP CERAMIC 820PF
C116	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C117	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C118	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C119	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C120	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C121	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C122	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C123	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C124	1-162-916-11	s CAPACITOR,CERAMIC 12PF/50V CH
C125	1-162-916-11	s CAPACITOR,CERAMIC 12PF/50V CH
C126	1-162-916-11	s CAPACITOR,CERAMIC 12PF/50V CH
C127	1-162-916-11	s CAPACITOR,CERAMIC 12PF/50V CH
C128	1-162-919-11	s CAPACITOR,CERAMIC 22PF/50V CH
C129	1-162-919-11	s CAPACITOR,CERAMIC 22PF/50V CH
C130	1-162-919-11	s CAPACITOR,CERAMIC 22PF/50V CH
C131	1-162-919-11	s CAPACITOR,CERAMIC 22PF/50V CH
C132	1-162-916-11	s CAPACITOR,CERAMIC 12PF/50V CH
C133	1-162-916-11	s CAPACITOR,CERAMIC 12PF/50V CH
C134	1-162-916-11	s CAPACITOR,CERAMIC 12PF/50V CH
C135	1-162-916-11	s CAPACITOR,CERAMIC 12PF/50V CH
C136	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C137	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C138	1-162-908-11	s CAPACITOR,CERAMIC 3PF/50V 1608
C139	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C140	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C141	1-162-908-11	s CAPACITOR,CERAMIC 3PF/50V 1608
C142	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C143	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C144	1-162-908-11	s CAPACITOR,CERAMIC 3PF/50V 1608
C145	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C146	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C147	1-162-908-11	s CAPACITOR,CERAMIC 3PF/50V 1608
C148	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C149	1-164-173-11	s CAPACITOR,CERAMIC 3900PF/50V B
C150	1-164-173-11	s CAPACITOR,CERAMIC 3900PF/50V B
C151	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C152	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF

(DEN-20/20A BOARD)

Ref. No. or Q'ty	Part No.	SP Description
C200	1-107-826-11 s	CAPACITOR,CHIP CERAMIC 0.1MF
C201	1-107-826-11 s	CAPACITOR,CHIP CERAMIC 0.1MF
C202	1-104-851-11 s	CAPACITOR,TANTALUM 10MF/10V
C203	1-107-826-11 s	CAPACITOR,CHIP CERAMIC 0.1MF
C204	1-107-826-11 s	CAPACITOR,CHIP CERAMIC 0.1MF
C205	1-104-851-11 s	CAPACITOR,TANTALUM 10MF/10V
C206	1-104-851-11 s	CAPACITOR,TANTALUM 10MF/10V
C207	1-107-826-11 s	CAPACITOR,CHIP CERAMIC 0.1MF
C208	1-107-826-11 s	CAPACITOR,CHIP CERAMIC 0.1MF
C209	1-126-394-11 s	CAPACITOR,ELECT 10MF/16V (CHIP)
C210	1-126-394-11 s	CAPACITOR,ELECT 10MF/16V (CHIP)
C211	1-126-394-11 s	CAPACITOR,ELECT 10MF/16V (CHIP)
C212	1-126-394-11 s	CAPACITOR,ELECT 10MF/16V (CHIP)
C213	1-107-826-11 s	CAPACITOR,CHIP CERAMIC 0.1MF
C214	1-104-851-11 s	CAPACITOR,TANTALUM 10MF/10V
C215	1-162-927-11 s	CAPACITOR,CERAMIC 100PF/50V CH
C216	1-162-927-11 s	CAPACITOR,CERAMIC 100PF/50V CH
C217	1-107-826-11 s	CAPACITOR,CHIP CERAMIC 0.1MF
C218	1-126-394-11 s	CAPACITOR,ELECT 10MF/16V (CHIP)
C219	1-126-394-11 s	CAPACITOR,ELECT 10MF/16V (CHIP)
C220	1-126-394-11 s	CAPACITOR,ELECT 10MF/16V (CHIP)
C221	1-126-394-11 s	CAPACITOR,ELECT 10MF/16V (CHIP)
C222	1-164-227-11 s	CAPACITOR,CERAMIC 0.022MF/25V
C223	1-164-227-11 s	CAPACITOR,CERAMIC 0.022MF/25V
C224	1-162-927-11 s	CAPACITOR,CERAMIC 100PF/50V CH
C225	1-162-927-11 s	CAPACITOR,CERAMIC 100PF/50V CH
C226	1-162-927-11 s	CAPACITOR,CERAMIC 100PF/50V CH
C227	1-162-927-11 s	CAPACITOR,CERAMIC 100PF/50V CH
C228	1-162-927-11 s	CAPACITOR,CERAMIC 100PF/50V CH
C229	1-162-927-11 s	CAPACITOR,CERAMIC 100PF/50V CH
C230	1-126-395-11 s	CAPACITOR,ELECT 22MF/16V (CHIP)
C231	1-126-395-11 s	CAPACITOR,ELECT 22MF/16V (CHIP)
C232	1-162-923-11 s	CAPACITOR,CERAMIC 47PF/50V CH
C233	1-126-396-11 s	CAPACITOR,ELECT 47MF/16V (CHIP)
C234	1-126-395-11 s	CAPACITOR,ELECT 22MF/16V (CHIP)
C235	1-107-826-11 s	CAPACITOR,CHIP CERAMIC 0.1MF
C236	1-107-826-11 s	CAPACITOR,CHIP CERAMIC 0.1MF
C237	1-107-826-11 s	CAPACITOR,CHIP CERAMIC 0.1MF
C238	1-107-826-11 s	CAPACITOR,CHIP CERAMIC 0.1MF
C239	1-162-927-11 s	CAPACITOR,CERAMIC 100PF/50V CH
C240	1-162-927-11 s	CAPACITOR,CERAMIC 100PF/50V CH
C241	1-164-227-11 s	CAPACITOR,CERAMIC 0.022MF/25V
C242	1-164-227-11 s	CAPACITOR,CERAMIC 0.022MF/25V
C243	1-164-227-11 s	CAPACITOR,CERAMIC 0.022MF/25V
C244	1-164-227-11 s	CAPACITOR,CERAMIC 0.022MF/25V
C245	1-107-826-11 s	CAPACITOR,CHIP CERAMIC 0.1MF
C300	1-107-826-11 s	CAPACITOR,CHIP CERAMIC 0.1MF
C301	1-107-826-11 s	CAPACITOR,CHIP CERAMIC 0.1MF
C302	1-107-826-11 s	CAPACITOR,CHIP CERAMIC 0.1MF
C303	1-107-826-11 s	CAPACITOR,CHIP CERAMIC 0.1MF
C304	1-162-927-11 s	CAPACITOR,CERAMIC 100PF/50V CH
C305	1-162-927-11 s	CAPACITOR,CERAMIC 100PF/50V CH
C306	1-126-396-11 s	CAPACITOR,ELECT 47MF/16V (CHIP)
C307	1-126-395-11 s	CAPACITOR,ELECT 22MF/16V (CHIP)
C308	1-126-395-11 s	CAPACITOR,ELECT 22MF/16V (CHIP)
C309	1-162-923-11 s	CAPACITOR,CERAMIC 47PF/50V CH
C310	1-162-923-11 s	CAPACITOR,CERAMIC 47PF/50V CH
C311	1-162-923-11 s	CAPACITOR,CERAMIC 47PF/50V CH
C312	1-162-923-11 s	CAPACITOR,CERAMIC 47PF/50V CH

(DEN-20/20A BOARD)

Ref. No. or Q'ty	Part No.	SP Description
C313	1-126-396-11 s	CAPACITOR,ELECT 47MF/16V (CHIP)
C314	1-162-927-11 s	CAPACITOR,CERAMIC 100PF/50V CH
C315	1-162-927-11 s	CAPACITOR,CERAMIC 100PF/50V CH
C316	1-128-398-11 s	CAP, ELECT 220MF/16V (CHIP)
C317	1-128-398-11 s	CAP, ELECT 220MF/16V (CHIP)
C318	1-128-398-11 s	CAP, ELECT 220MF/16V (CHIP)
C319	1-128-398-11 s	CAP, ELECT 220MF/16V (CHIP)
C400	1-131-661-11 s	CAPACITOR,ELECT 100MF/10V CHIP
C401	1-128-398-11 s	CAP, ELECT 220MF/16V (CHIP)
C402	1-164-227-11 s	CAPACITOR,CERAMIC 0.022MF/25V
C403	1-164-227-11 s	CAPACITOR,CERAMIC 0.022MF/25V
C404	1-164-227-11 s	CAPACITOR,CERAMIC 0.022MF/25V
C405	1-164-227-11 s	CAPACITOR,CERAMIC 0.022MF/25V
C406	1-164-227-11 s	CAPACITOR,CERAMIC 0.022MF/25V
C407	1-164-227-11 s	CAPACITOR,CERAMIC 0.022MF/25V
C408	1-164-227-11 s	CAPACITOR,CERAMIC 0.022MF/25V
C409	1-126-396-11 s	CAPACITOR,ELECT 47MF/16V (CHIP)
C410	1-126-396-11 s	CAPACITOR,ELECT 47MF/16V (CHIP)
C411	1-126-394-11 s	CAPACITOR,ELECT 10MF/16V (CHIP)
C412	1-126-394-11 s	CAPACITOR,ELECT 10MF/16V (CHIP)
C413	1-126-396-11 s	CAPACITOR,ELECT 47MF/16V (CHIP)
C414	1-126-396-11 s	CAPACITOR,ELECT 47MF/16V (CHIP)
C415	1-164-227-11 s	CAPACITOR,CERAMIC 0.022MF/25V
C416	1-164-227-11 s	CAPACITOR,CERAMIC 0.022MF/25V
C417	1-164-227-11 s	CAPACITOR,CERAMIC 0.022MF/25V
C418	1-164-227-11 s	CAPACITOR,CERAMIC 0.022MF/25V
C419	1-164-227-11 s	CAPACITOR,CERAMIC 0.022MF/25V
C420	1-162-964-11 s	CAPACITOR,CERAMIC 1000PF/50V B
C421	1-131-661-11 s	CAPACITOR,ELECT 100MF/10V CHIP
C422	1-137-740-91 s	CAP, TANTALUM ELECT 47MF (3528)
C423	1-131-661-11 s	CAPACITOR,ELECT 100MF/10V CHIP
C424	1-164-227-11 s	CAPACITOR,CERAMIC 0.022MF/25V
C425	1-162-970-11 s	CAPACITOR CERAMIC 0.01MF/25V B
C426	1-107-826-11 s	CAPACITOR,CHIP CERAMIC 0.1MF
C427	1-162-927-11 s	CAPACITOR,CERAMIC 100PF/50V CH
C428	1-107-826-11 s	CAPACITOR,CHIP CERAMIC 0.1MF
C429	1-107-826-11 s	CAPACITOR,CHIP CERAMIC 0.1MF
C430	1-164-227-11 s	CAPACITOR,CERAMIC 0.022MF/25V
C431	1-164-227-11 s	CAPACITOR,CERAMIC 0.022MF/25V
C432	1-107-826-11 s	CAPACITOR,CHIP CERAMIC 0.1MF
C433	1-107-826-11 s	CAPACITOR,CHIP CERAMIC 0.1MF
C434	1-164-227-11 s	CAPACITOR,CERAMIC 0.022MF/25V
C435	1-164-227-11 s	CAPACITOR,CERAMIC 0.022MF/25V
C436	1-131-661-11 s	CAPACITOR,ELECT 100MF/10V CHIP
C437	1-131-661-11 s	CAPACITOR,ELECT 100MF/10V CHIP
C438	1-107-826-11 s	CAPACITOR,CHIP CERAMIC 0.1MF
CN1	1-794-873-11 o	CONNECTOR, BNC 2P
CN2	1-774-966-11 o	CONNECTOR, BNC (RECEPTACLE)
CN3	*E 1-793-985-21 o	CONNECTOR (PLUG)
CN4	*E 1-793-985-21 o	CONNECTOR (PLUG)
CN5	*J 1-793-986-11 o	CONNECTOR (RECEPTACLE)
CN6	*J 1-793-986-11 o	CONNECTOR (RECEPTACLE)
CN7	1-794-820-11 s	JACK, PIN (1P)
CN200	1-766-431-21 o	HOUSING, CONNECTOR 30P
CN201	1-766-431-21 o	HOUSING, CONNECTOR 30P
D300	8-719-801-78 s	DIODE 1SS184
D301	8-719-820-41 s	DIODE 1SS302
D302	8-719-820-41 s	DIODE 1SS302

(DEN-20/20A BOARD)

Ref. No. or Q'ty	Part No.	SP Description
D303	8-719-820-41	s DIODE 1SS302
D304	8-719-820-41	s DIODE 1SS302
D305	8-719-820-41	s DIODE 1SS302
D306	8-719-820-41	s DIODE 1SS302
D401	8-719-987-69	s DIODE DAN217
D402	8-719-987-69	s DIODE DAN217
D403	8-719-987-69	s DIODE DAN217
D404	8-719-987-69	s DIODE DAN217
D405	8-719-987-69	s DIODE DAN217
D406	8-719-987-69	s DIODE DAN217
FL100	1-239-896-12	s FILTER, EMI (SMD)
FL101	1-239-896-12	s FILTER, EMI (SMD)
FL102	1-239-896-12	s FILTER, EMI (SMD)
FL103	1-239-896-12	s FILTER, EMI (SMD)
FL200	1-239-895-11	s FILTER, EMI (SMD)
FL300	1-239-895-11	s FILTER, EMI (SMD)
FL301	1-239-895-11	s FILTER, EMI (SMD)
FL302	1-239-895-11	s FILTER, EMI (SMD)
FL303	1-239-895-11	s FILTER, EMI (SMD)
FL400	1-239-896-12	s FILTER, EMI (SMD)
FL401	1-239-896-12	s FILTER, EMI (SMD)
IC100	6-701-079-01	s IC ADV7300
IC101	6-701-079-01	s IC ADV7300
IC102	6-702-231-01	s IC LMH6642MFX
IC103	6-702-231-01	s IC LMH6642MFX
IC105	8-759-082-60	s IC TC7S66FU
IC106	6-702-231-01	s IC LMH6642MFX
IC107	6-702-231-01	s IC LMH6642MFX
IC108	6-702-231-01	s IC LMH6642MFX
IC109	6-702-231-01	s IC LMH6642MFX
IC110	8-759-082-60	s IC TC7S66FU
IC111	8-749-018-41	s IC SI-3025LSA-TL
IC112	8-759-529-76	s IC TC74VHC595FT (EL)
IC200	8-759-490-41	s IC TC74VHC541AFT (EL)
IC201	8-759-570-08	s IC TC7SET32FU (TE85R)
IC202	8-759-536-23	s IC AK4324-VF-E2
IC203	8-759-536-23	s IC AK4324-VF-E2
IC204	8-759-711-85	s IC NJM4580E-D
IC205	8-759-711-85	s IC NJM4580E-D
IC206	8-759-711-85	s IC NJM4580E-D
IC207	8-759-711-85	s IC NJM4580E-D
IC208	8-759-833-99	s IC MC74HC4052ADTR2
IC209	8-759-833-99	s IC MC74HC4052ADTR2
IC300	8-759-833-99	s IC MC74HC4052ADTR2
IC301	8-759-833-99	s IC MC74HC4052ADTR2
IC302	8-759-711-85	s IC NJM4580E-D
IC303	8-759-711-85	s IC NJM4580E-D
IC304	8-759-281-24	s IC SSM-2142S (R)
IC305	8-759-281-24	s IC SSM-2142S (R)
IC400	8-759-442-54	s IC RH5RL50AA-T1
IC401	8-759-460-72	s IC BA033FP
IC402	8-759-180-19	s IC NJU7211U50-TE1
IC403	6-700-915-01	s IC SN74AHCT04PWR
IC404	8-759-278-58	s IC NJM4558V (TE2)
IC405	8-759-646-99	s IC NJM4556AV (TE2)
IC406	8-759-338-95	s IC NJM2903V (TE2)
IC407	8-759-533-85	s IC L88M05T-FA-TL
IC408	8-759-180-19	s IC NJU7211U50-TE1

(DEN-20/20A BOARD)

Ref. No. or Q'ty	Part No.	SP Description
L100	1-412-982-21	s INDUCTOR (SMALL TYPE)
L101	1-412-982-21	s INDUCTOR (SMALL TYPE)
L102	1-412-982-21	s INDUCTOR (SMALL TYPE)
L103	1-412-982-21	s INDUCTOR (SMALL TYPE)
PS400	Δ 1-533-282-21	s CIRCUIT PROTECTOR 2A (3225)
PS401	Δ 1-533-282-21	s CIRCUIT PROTECTOR 2A (3225)
PS402	Δ 1-533-282-21	s CIRCUIT PROTECTOR 2A (3225)
PS403	Δ 1-533-282-21	s CIRCUIT PROTECTOR 2A (3225)
PS404	Δ 1-533-282-21	s CIRCUIT PROTECTOR 2A (3225)
Q107	8-729-021-09	s TRANSISTOR RN4904 (TE85R)
Q200	8-729-209-07	s TRANSISTOR 2SC4213-B
Q300	8-729-928-81	s TRANSISTOR DTC144EE
Q301	8-729-110-94	s TRANSISTOR 2SK425-X15 (0.2W)
Q302	8-729-209-07	s TRANSISTOR 2SC4213-B
Q303	8-729-209-07	s TRANSISTOR 2SC4213-B
Q304	8-729-141-48	s TRANSISTOR 2SB624-BV345
Q305	8-729-110-94	s TRANSISTOR 2SK425-X15 (0.2W)
Q306	8-729-141-48	s TRANSISTOR 2SB624-BV345
Q307	8-729-209-07	s TRANSISTOR 2SC4213-B
Q308	8-729-209-07	s TRANSISTOR 2SC4213-B
Q309	8-729-209-07	s TRANSISTOR 2SC4213-B
Q310	8-729-209-07	s TRANSISTOR 2SC4213-B
Q400	8-729-020-93	s TRANSISTOR 2SC2982C-TE12L
Q401	8-729-106-60	s TRANSISTOR 2SB1115A
Q402	8-729-928-27	s TRANSISTOR DTA144EE
Q403	8-729-928-27	s TRANSISTOR DTA144EE
Q404	8-729-422-44	s TRANSISTOR 2SK663
Q405	8-729-422-44	s TRANSISTOR 2SK663
R100	1-216-864-11	s CONDUCTOR, CHIP (1608)
R101	1-216-864-11	s CONDUCTOR, CHIP (1608)
R102	1-218-895-11	s RESISTOR,CHIP 100K 1/10W(1608)
R103	1-218-895-11	s RESISTOR,CHIP 100K 1/10W(1608)
R105	1-218-871-11	s RESISTOR,CHIP 10K 1/10W (1608)
R106	1-218-871-11	s RESISTOR,CHIP 10K 1/10W (1608)
R108	1-216-801-11	s RESISTOR,CHIP 22 1/10W (1608)
R109	1-216-801-11	s RESISTOR,CHIP 22 1/10W (1608)
R110	1-216-801-11	s RESISTOR,CHIP 22 1/10W (1608)
R111	1-218-871-11	s RESISTOR,CHIP 10K 1/10W (1608)
R112	1-216-801-11	s RESISTOR,CHIP 22 1/10W (1608)
R113	1-216-864-11	s CONDUCTOR, CHIP (1608)
R114	1-216-864-11	s CONDUCTOR, CHIP (1608)
R115	1-216-801-11	s RESISTOR,CHIP 22 1/10W (1608)
R117	1-216-801-11	s RESISTOR,CHIP 22 1/10W (1608)
R119	1-218-847-11	s RESISTOR, CHIP 1K 1/10W (1608)
R120	1-218-831-11	s RESISTOR, CHIP 220 1/10W(1608)
R121	1-218-851-11	s RESISTOR,CHIP 1.5K 1/10W(1608)
R123	1-218-847-11	s RESISTOR, CHIP 1K 1/10W (1608)
R124	1-218-831-11	s RESISTOR, CHIP 220 1/10W(1608)
R125	1-218-851-11	s RESISTOR,CHIP 1.5K 1/10W(1608)
R126	1-218-831-11	s RESISTOR, CHIP 220 1/10W(1608)
R127	1-218-831-11	s RESISTOR, CHIP 220 1/10W(1608)
R128	1-218-837-11	s RESISTOR,CHIP 390 1/10W (1608)
R129	1-218-837-11	s RESISTOR,CHIP 390 1/10W (1608)
R130	1-218-837-11	s RESISTOR,CHIP 390 1/10W (1608)
R131	1-218-837-11	s RESISTOR,CHIP 390 1/10W (1608)
R132	1-218-871-11	s RESISTOR,CHIP 10K 1/10W (1608)
R133	1-218-837-11	s RESISTOR,CHIP 390 1/10W (1608)
R134	1-218-837-11	s RESISTOR,CHIP 390 1/10W (1608)

(DEN-20/20A BOARD)

Ref. No. or Q'ty	Part No.	SP Description
R135	1-218-837-11 s	RESISTOR,CHIP 390 1/10W (1608)
R136	1-218-837-11 s	RESISTOR,CHIP 390 1/10W (1608)
R137	1-218-827-11 s	RESISTOR,CHIP 150 1/10W (1608)
R138	1-218-855-11 s	RESISTOR,CHIP 2.2K 1/10W(1608)
R139	1-218-855-11 s	RESISTOR,CHIP 2.2K 1/10W(1608)
R140	1-218-855-11 s	RESISTOR,CHIP 2.2K 1/10W(1608)
R141	1-218-855-11 s	RESISTOR,CHIP 2.2K 1/10W(1608)
R142	1-218-846-11 s	RESISTOR,CHIP 910 1/10W (1608)
R143	1-218-855-11 s	RESISTOR,CHIP 2.2K 1/10W(1608)
R144	1-218-846-11 s	RESISTOR,CHIP 910 1/10W (1608)
R145	1-218-825-11 s	RESISTOR,CHIP 120 1/10W (1608)
R146	1-218-855-11 s	RESISTOR,CHIP 2.2K 1/10W(1608)
R147	1-218-855-11 s	RESISTOR,CHIP 2.2K 1/10W(1608)
R148	1-218-859-11 s	RESISTOR,CHIP 3.3K 1/10W(1608)
R149	1-218-825-11 s	RESISTOR,CHIP 120 1/10W (1608)
R150	1-211-990-11 s	RESISTOR,CHIP 75 1/10W (1608)
R151	1-211-990-11 s	RESISTOR,CHIP 75 1/10W (1608)
R152	1-211-990-11 s	RESISTOR,CHIP 75 1/10W (1608)
R153	1-211-990-11 s	RESISTOR,CHIP 75 1/10W (1608)
R154	1-218-843-11 s	RESISTOR,CHIP 680 1/10W (1608)
R155	1-218-843-11 s	RESISTOR,CHIP 680 1/10W (1608)
R156	1-216-864-11 s	CONDUCTOR, CHIP (1608)
R157	1-216-864-11 s	CONDUCTOR, CHIP (1608)
R158	1-216-864-11 s	CONDUCTOR, CHIP (1608)
R159	1-216-864-11 s	CONDUCTOR, CHIP (1608)
R164	1-211-981-11 s	RESISTOR,CHIP 33 1/10W (1608)
R165	1-218-849-11 s	RESISTOR,CHIP 1.2K 1/10W(1608)
R166	1-218-851-11 s	RESISTOR,CHIP 1.5K 1/10W(1608)
R167	1-218-855-11 s	RESISTOR,CHIP 2.2K 1/10W(1608)
R168	1-211-981-11 s	RESISTOR,CHIP 33 1/10W (1608)
R169	1-218-849-11 s	RESISTOR,CHIP 1.2K 1/10W(1608)
R170	1-216-864-11 s	CONDUCTOR, CHIP (1608)
R171	1-216-864-11 s	CONDUCTOR, CHIP (1608)
R172	1-216-864-11 s	CONDUCTOR, CHIP (1608)
R173	1-216-864-11 s	CONDUCTOR, CHIP (1608)
R176	1-216-864-11 s	CONDUCTOR, CHIP (1608)
R177	1-216-864-11 s	CONDUCTOR, CHIP (1608)
R178	1-216-864-11 s	CONDUCTOR, CHIP (1608)
R179	1-216-864-11 s	CONDUCTOR, CHIP (1608)
R200	1-216-801-11 s	RESISTOR,CHIP 22 1/10W (1608)
R201	1-218-895-11 s	RESISTOR,CHIP 100K 1/10W(1608)
R202	1-218-895-11 s	RESISTOR,CHIP 100K 1/10W(1608)
R203	1-211-969-11 s	RESISTOR,CHIP 10 1/10W (1608)
R204	1-211-969-11 s	RESISTOR,CHIP 10 1/10W (1608)
R205	1-218-880-11 s	RESISTOR,CHIP 24K 1/10W (1608)
R206	1-218-880-11 s	RESISTOR,CHIP 24K 1/10W (1608)
R207	1-218-880-11 s	RESISTOR,CHIP 24K 1/10W (1608)
R208	1-218-880-11 s	RESISTOR,CHIP 24K 1/10W (1608)
R209	1-218-881-11 s	RESISTOR,CHIP 27K 1/10W(1608)
R210	1-218-881-11 s	RESISTOR,CHIP 27K 1/10W(1608)
R211	1-218-880-11 s	RESISTOR,CHIP 24K 1/10W (1608)
R212	1-218-880-11 s	RESISTOR,CHIP 24K 1/10W (1608)
R213	1-218-881-11 s	RESISTOR,CHIP 27K 1/10W(1608)
R214	1-218-881-11 s	RESISTOR,CHIP 27K 1/10W(1608)
R215	1-218-880-11 s	RESISTOR,CHIP 24K 1/10W (1608)
R216	1-218-880-11 s	RESISTOR,CHIP 24K 1/10W (1608)
R217	1-218-881-11 s	RESISTOR,CHIP 27K 1/10W(1608)
R218	1-218-881-11 s	RESISTOR,CHIP 27K 1/10W(1608)
R219	1-218-881-11 s	RESISTOR,CHIP 27K 1/10W(1608)

(DEN-20/20A BOARD)

Ref. No. or Q'ty	Part No.	SP Description
R220	1-218-881-11 s	RESISTOR,CHIP 27K 1/10W(1608)
R221	1-218-871-11 s	RESISTOR,CHIP 10K 1/10W (1608)
R222	1-218-871-11 s	RESISTOR,CHIP 10K 1/10W (1608)
R223	1-216-864-11 s	CONDUCTOR, CHIP (1608)
R224	1-218-864-11 s	RESISTOR,CHIP 5.1K 1/10W(1608)
R225	1-218-865-11 s	RESISTOR,CHIP 5.6K 1/10W(1608)
R226	1-218-868-11 s	RESISTOR,CHIP 7.5K 1/10W(1608)
R227	1-218-875-11 s	RESISTOR,CHIP 15K 1/10W (1608)
R228	1-218-870-11 s	RESISTOR,CHIP 9.1K 1/10W(1608)
R229	1-218-865-11 s	RESISTOR,CHIP 5.6K 1/10W(1608)
R230	1-218-868-11 s	RESISTOR,CHIP 7.5K 1/10W(1608)
R231	1-218-875-11 s	RESISTOR,CHIP 15K 1/10W (1608)
R232	1-218-870-11 s	RESISTOR,CHIP 9.1K 1/10W(1608)
R233	1-218-836-11 s	RESISTOR,CHIP 360 1/10W (1608)
R234	1-218-837-11 s	RESISTOR,CHIP 390 1/10W (1608)
R235	1-218-836-11 s	RESISTOR,CHIP 360 1/10W (1608)
R236	1-218-837-11 s	RESISTOR,CHIP 390 1/10W (1608)
R237	1-218-831-11 s	RESISTOR,CHIP 220 1/10W(1608)
R238	1-216-803-11 s	RESISTOR,CHIP 33 1/16W (1608)
R239	1-218-864-11 s	RESISTOR,CHIP 5.1K 1/10W(1608)
R240	1-218-864-11 s	RESISTOR,CHIP 5.1K 1/10W(1608)
R241	1-218-835-11 s	RESISTOR,CHIP 330 1/10W (1608)
R242	1-218-835-11 s	RESISTOR,CHIP 330 1/10W (1608)
R243	1-218-839-11 s	RESISTOR,CHIP 470 1/10W (1608)
R244	1-218-839-11 s	RESISTOR,CHIP 470 1/10W (1608)
R300	1-218-863-11 s	RESISTOR,CHIP 4.7K 1/10W(1608)
R301	1-218-868-11 s	RESISTOR,CHIP 7.5K 1/10W(1608)
R302	1-218-875-11 s	RESISTOR,CHIP 15K 1/10W (1608)
R303	1-218-871-11 s	RESISTOR,CHIP 10K 1/10W (1608)
R304	1-218-863-11 s	RESISTOR,CHIP 4.7K 1/10W(1608)
R305	1-218-868-11 s	RESISTOR,CHIP 7.5K 1/10W(1608)
R306	1-218-875-11 s	RESISTOR,CHIP 15K 1/10W (1608)
R307	1-218-871-11 s	RESISTOR,CHIP 10K 1/10W (1608)
R308	1-211-983-11 s	RESISTOR,CHIP 39 1/10W (1608)
R309	1-218-842-11 s	RESISTOR,CHIP 620 1/10W (1608)
R310	1-211-983-11 s	RESISTOR,CHIP 39 1/10W (1608)
R311	1-218-842-11 s	RESISTOR,CHIP 620 1/10W (1608)
R312	1-218-863-11 s	RESISTOR,CHIP 4.7K 1/10W(1608)
R313	1-218-863-11 s	RESISTOR,CHIP 4.7K 1/10W(1608)
R314	1-218-839-11 s	RESISTOR,CHIP 470 1/10W (1608)
R315	1-218-834-11 s	RESISTOR,CHIP 300 1/10W (1608)
R316	1-218-834-11 s	RESISTOR,CHIP 300 1/10W (1608)
R317	1-218-823-11 s	RESISTOR,CHIP 100 1/10W (1608)
R318	1-218-860-11 s	RESISTOR,CHIP 3.6K 1/10W(1608)
R319	1-218-860-11 s	RESISTOR,CHIP 3.6K 1/10W(1608)
R320	1-218-861-11 s	RESISTOR,CHIP 3.9K 1/10W(1608)
R321	1-218-861-11 s	RESISTOR,CHIP 3.9K 1/10W(1608)
R322	1-218-861-11 s	RESISTOR,CHIP 3.9K 1/10W(1608)
R323	1-218-872-11 s	RESISTOR,CHIP 11K 1/10W (1608)
R324	1-218-872-11 s	RESISTOR,CHIP 11K 1/10W (1608)
R325	1-218-861-11 s	RESISTOR,CHIP 3.9K 1/10W(1608)
R326	1-218-861-11 s	RESISTOR,CHIP 3.9K 1/10W(1608)
R327	1-218-872-11 s	RESISTOR,CHIP 11K 1/10W (1608)
R328	1-218-872-11 s	RESISTOR,CHIP 11K 1/10W (1608)
R329	1-218-871-11 s	RESISTOR,CHIP 10K 1/10W (1608)
R330	1-216-803-11 s	RESISTOR,CHIP 33 1/16W (1608)
R331	1-216-803-11 s	RESISTOR,CHIP 33 1/16W (1608)
R332	1-216-803-11 s	RESISTOR,CHIP 33 1/16W (1608)
R333	1-216-803-11 s	RESISTOR,CHIP 33 1/16W (1608)

(DEN-20/20A BOARD)

Ref. No. or Q'ty	Part No.	SP Description
R334	1-218-871-11	s RESISTOR,CHIP 10K 1/10W (1608)
R335	1-218-871-11	s RESISTOR,CHIP 10K 1/10W (1608)
R336	1-218-871-11	s RESISTOR,CHIP 10K 1/10W (1608)
R337	1-218-871-11	s RESISTOR,CHIP 10K 1/10W (1608)
R338	*E 1-216-864-11	s CONDUCTOR, CHIP (1608)
R339	*J 1-216-864-11	s CONDUCTOR, CHIP (1608)
R340	*E 1-216-864-11	s CONDUCTOR, CHIP (1608)
R341	*J 1-216-864-11	s CONDUCTOR, CHIP (1608)
R342	*J 1-216-864-11	s CONDUCTOR, CHIP (1608)
R343	*J 1-216-864-11	s CONDUCTOR, CHIP (1608)
R344	*E 1-216-864-11	s CONDUCTOR, CHIP (1608)
R345	*E 1-216-864-11	s CONDUCTOR, CHIP (1608)
R400	1-218-895-11	s RESISTOR,CHIP 100K 1/10W(1608)
R401	1-218-871-11	s RESISTOR,CHIP 10K 1/10W (1608)
R402	1-218-859-11	s RESISTOR,CHIP 3.3K 1/10W(1608)
R403	1-218-849-11	s RESISTOR,CHIP 1.2K 1/10W(1608)
R404	1-218-849-11	s RESISTOR,CHIP 1.2K 1/10W(1608)
R406	1-218-887-11	s RESISTOR,CHIP 47K 1/10W (1608)
R407	1-218-887-11	s RESISTOR,CHIP 47K 1/10W (1608)
R408	1-218-855-11	s RESISTOR,CHIP 2.2K 1/10W(1608)
R409	1-218-855-11	s RESISTOR,CHIP 2.2K 1/10W(1608)
R410	1-211-990-11	s RESISTOR,CHIP 75 1/10W (1608)
R411	1-218-895-11	s RESISTOR,CHIP 100K 1/10W(1608)
R412	1-218-869-11	s RESISTOR,CHIP 8.2K 1/10W(1608)
R413	1-218-879-11	s RESISTOR,CHIP 22K 1/10W (1608)
R414	1-218-879-11	s RESISTOR,CHIP 22K 1/10W (1608)
R415	1-218-859-11	s RESISTOR,CHIP 3.3K 1/10W(1608)
R416	1-218-895-11	s RESISTOR,CHIP 100K 1/10W(1608)
R417	1-216-857-11	s RESISTOR,CHIP 1M 1/10W(1608)
R418	1-216-857-11	s RESISTOR,CHIP 1M 1/10W(1608)
R419	1-218-847-11	s RESISTOR, CHIP 1K 1/10W (1608)
R420	1-216-857-11	s RESISTOR,CHIP 1M 1/10W(1608)
R421	1-216-857-11	s RESISTOR,CHIP 1M 1/10W(1608)
R422	1-218-863-11	s RESISTOR,CHIP 4.7K 1/10W(1608)
R423	1-218-895-11	s RESISTOR,CHIP 100K 1/10W(1608)
R424	1-218-857-11	s RESISTOR,CHIP 2.7K 1/10W(1608)
R426	1-218-865-11	s RESISTOR,CHIP 5.6K 1/10W(1608)
R427	1-218-863-11	s RESISTOR,CHIP 4.7K 1/10W(1608)
RB100	1-233-575-11	s RES, CHIP NETWORK 22
RB101	1-233-575-11	s RES, CHIP NETWORK 22
RB102	1-233-575-11	s RES, CHIP NETWORK 22
RB103	1-233-575-11	s RES, CHIP NETWORK 22
RB200	1-233-575-11	s RES, CHIP NETWORK 22
RB201	1-233-810-21	s RES, NETWORK 100K (3216)
RB202	1-239-409-11	s RESISTOR NETWORK 47 (1608)
RB203	1-239-409-11	s RESISTOR NETWORK 47 (1608)
RV101	1-225-787-21	s RES, ADJ, CERMET 500
RV102	1-225-787-21	s RES, ADJ, CERMET 500

DIF-140 BOARD

Ref. No. or Q'ty	Part No.	SP Description
1pc	A-8345-407-A	s MOUNTED CIRCUIT BOARD, DIF-140
1pc	2-280-622-41	o SUPPORT (M3),HEXAGON
1pc	7-682-903-11	s SCREW +FWH 3X6
2pcs	7-685-862-09	s SCREW,+BVTP 2.6X6 (EP-FE/ZNBK/C
C1	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C2	1-137-740-91	s CAP, TANTALUM ELECT 47MF(3528)
C101	1-162-919-11	s CAPACITOR,CERAMIC 22PF/50V CH
C102	1-162-919-11	s CAPACITOR,CERAMIC 22PF/50V CH
C103	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C104	1-165-847-91	s CAPACITOR TANTALUM ELECT 4.7MF
C105	1-165-847-91	s CAPACITOR TANTALUM ELECT 4.7MF
C106	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C107	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C108	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C109	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C110	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C111	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C112	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C113	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C114	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C115	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C117	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
CN1	1-815-187-11	s JACK, MODULAR
IC101	6-700-129-01	s IC GD82559ER
R1	1-216-864-11	s CONDUCTOR, CHIP (1608)
R101	1-216-845-11	s RESISTOR,CHIP 100K 1/10W(1608)
R102	1-211-985-11	s RESISTOR,CHIP 47 1/10W (1608)
R103	1-216-845-11	s RESISTOR,CHIP 100K 1/10W(1608)
R104	1-216-821-11	s RESISTOR,CHIP 1.0K 1/10W(1608)
R105	1-216-821-11	s RESISTOR,CHIP 1.0K 1/10W(1608)
R106	1-216-845-11	s RESISTOR,CHIP 100K 1/10W(1608)
R107	1-216-845-11	s RESISTOR,CHIP 100K 1/10W(1608)
R108	1-216-809-11	s RESISTOR,CHIP 100 1/10W 1608
R109	1-216-821-11	s RESISTOR,CHIP 1.0K 1/10W(1608)
R110	1-218-825-11	s RESISTOR,CHIP 120 1/10W (1608)
R111	1-216-821-11	s RESISTOR,CHIP 1.0K 1/10W(1608)
R112	1-216-829-11	s RESISTOR,CHIP 4.7K 1/10W(1608)
R113	1-216-843-11	s RESISTOR,CHIP 68K 1/10W (1608)
R114	1-216-845-11	s RESISTOR,CHIP 100K 1/10W(1608)
R115	1-216-815-11	s RESISTOR,CHIP 330 1/10W 1608
R116	1-216-809-11	s RESISTOR,CHIP 100 1/10W 1608
R117	1-218-825-11	s RESISTOR,CHIP 120 1/10W (1608)
R118	1-216-815-11	s RESISTOR,CHIP 330 1/10W 1608
RB1	1-233-574-11	s RESISTOR,CHIP NETWORK 10
RB2	1-233-574-11	s RESISTOR,CHIP NETWORK 10
RB3	1-233-574-11	s RESISTOR,CHIP NETWORK 10
RB4	1-233-574-11	s RESISTOR,CHIP NETWORK 10
RB5	1-233-574-11	s RESISTOR,CHIP NETWORK 10
RB6	1-233-574-11	s RESISTOR,CHIP NETWORK 10
RB7	1-233-574-11	s RESISTOR,CHIP NETWORK 10
RB8	1-233-574-11	s RESISTOR,CHIP NETWORK 10
RB9	1-233-574-11	s RESISTOR,CHIP NETWORK 10
RB10	1-233-574-11	s RESISTOR,CHIP NETWORK 10
RB11	1-233-574-11	s RESISTOR,CHIP NETWORK 10
RB12	1-233-574-11	s RESISTOR,CHIP NETWORK 10
TP101	1-535-757-11	s CHIP, CHECKER (CONNECTOR)

(DIF-140 BOARD)

Ref. No. or Q'ty	Part No.	SP Description
X101	1-781-518-21	s VIBRATOR, CRYSTAL

DPR-224 BOARD

Ref. No. or Q'ty	Part No.	SP Description
1pc	A-8345-409-A	s MOUNTED CIRCUIT BOARD, DPR-224
1pc	1-795-685-11	s OSCILLATOR, CRYSTAL
C101	1-104-851-11	s CAPACITOR, TANTALUM 10MF/10V
C102	1-107-826-11	s CAPACITOR, CHIP CERAMIC 0.1MF
C103	1-109-982-11	s CAPACITOR, CHIP CERAMIC 1MF/10V
C104	1-107-826-11	s CAPACITOR, CHIP CERAMIC 0.1MF
C105	1-104-851-11	s CAPACITOR, TANTALUM 10MF/10V
C106	1-107-826-11	s CAPACITOR, CHIP CERAMIC 0.1MF
C107	1-107-826-11	s CAPACITOR, CHIP CERAMIC 0.1MF
C108	1-162-923-11	s CAPACITOR, CERAMIC 47PF/50V CH
C109	1-107-826-11	s CAPACITOR, CHIP CERAMIC 0.1MF
C110	1-162-915-11	s CAPACITOR, CERAMIC 10PF/50V CH
C111	1-109-982-11	s CAPACITOR, CHIP CERAMIC 1MF/10V
C112	1-107-826-11	s CAPACITOR, CHIP CERAMIC 0.1MF
C113	1-165-851-11	s CAPACITOR, TANTALUM ELECT 10MF
C114	1-107-826-11	s CAPACITOR, CHIP CERAMIC 0.1MF
C115	1-107-826-11	s CAPACITOR, CHIP CERAMIC 0.1MF
C116	1-165-851-11	s CAPACITOR, TANTALUM ELECT 10MF
C117	1-107-826-11	s CAPACITOR, CHIP CERAMIC 0.1MF
C118	1-107-826-11	s CAPACITOR, CHIP CERAMIC 0.1MF
C119	1-107-826-11	s CAPACITOR, CHIP CERAMIC 0.1MF
C120	1-165-851-11	s CAPACITOR, TANTALUM ELECT 10MF
C121	1-165-851-11	s CAPACITOR, TANTALUM ELECT 10MF
C122	1-107-826-11	s CAPACITOR, CHIP CERAMIC 0.1MF
C123	1-107-826-11	s CAPACITOR, CHIP CERAMIC 0.1MF
C124	1-107-826-11	s CAPACITOR, CHIP CERAMIC 0.1MF
C125	1-107-826-11	s CAPACITOR, CHIP CERAMIC 0.1MF
C126	1-107-826-11	s CAPACITOR, CHIP CERAMIC 0.1MF
C127	1-107-826-11	s CAPACITOR, CHIP CERAMIC 0.1MF
C128	1-128-398-11	s CAP, ELECT 220MF/16V (CHIP)
C129	1-137-740-91	s CAP, TANTALUM ELECT 47MF(3528)
C130	1-128-398-11	s CAP, ELECT 220MF/16V (CHIP)
C131	1-128-398-11	s CAP, ELECT 220MF/16V (CHIP)
C132	1-137-740-91	s CAP, TANTALUM ELECT 47MF(3528)
C133	1-137-740-91	s CAP, TANTALUM ELECT 47MF(3528)
C134	1-128-398-11	s CAP, ELECT 220MF/16V (CHIP)
C135	1-128-398-11	s CAP, ELECT 220MF/16V (CHIP)
C136	1-162-959-11	s CAPACITOR, CERAMIC 330PF/50V SL
C137	1-162-959-11	s CAPACITOR, CERAMIC 330PF/50V SL
C138	1-162-959-11	s CAPACITOR, CERAMIC 330PF/50V SL
C139	1-107-826-11	s CAPACITOR, CHIP CERAMIC 0.1MF
C140	1-107-826-11	s CAPACITOR, CHIP CERAMIC 0.1MF
C141	1-137-740-91	s CAP, TANTALUM ELECT 47MF(3528)
C142	1-107-826-11	s CAPACITOR, CHIP CERAMIC 0.1MF
C143	1-107-826-11	s CAPACITOR, CHIP CERAMIC 0.1MF
C144	1-137-740-91	s CAP, TANTALUM ELECT 47MF(3528)
C201	1-107-826-11	s CAPACITOR, CHIP CERAMIC 0.1MF
C202	1-165-848-11	s CAPACITOR, TANTALUM ELECT 10MF
C203	1-107-826-11	s CAPACITOR, CHIP CERAMIC 0.1MF
C204	1-107-826-11	s CAPACITOR, CHIP CERAMIC 0.1MF
C205	1-107-826-11	s CAPACITOR, CHIP CERAMIC 0.1MF
C206	1-107-826-11	s CAPACITOR, CHIP CERAMIC 0.1MF
C207	1-107-826-11	s CAPACITOR, CHIP CERAMIC 0.1MF
C208	1-107-826-11	s CAPACITOR, CHIP CERAMIC 0.1MF
C209	1-107-826-11	s CAPACITOR, CHIP CERAMIC 0.1MF
C210	1-107-826-11	s CAPACITOR, CHIP CERAMIC 0.1MF
C301	1-107-826-11	s CAPACITOR, CHIP CERAMIC 0.1MF
C302	1-107-826-11	s CAPACITOR, CHIP CERAMIC 0.1MF

(DPR-224 BOARD)

Ref. No. or Q ty	Part No.	SP Description
C303	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C304	1-126-396-11	s CAPACITOR,ELECT 47MF/16V(CHIP)
C305	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C306	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C401	1-104-851-11	s CAPACITOR,TANTALUM 10MF/10V
C402	1-104-851-11	s CAPACITOR,TANTALUM 10MF/10V
C403	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C404	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C405	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C406	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C407	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C408	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C409	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C410	1-104-851-11	s CAPACITOR,TANTALUM 10MF/10V
C411	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C412	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C413	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C414	1-162-915-11	s CAPACITOR,CERAMIC 10PF/50V CH
C415	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C416	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C417	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C418	1-104-851-11	s CAPACITOR,TANTALUM 10MF/10V
C419	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C420	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C421	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C422	1-162-911-11	s CAPACITOR,CERAMIC 6PF/50V 1608
C423	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C424	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C425	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C426	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C427	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C428	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C429	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C430	1-165-848-11	s CAPACITOR,TANTALUM ELECT 10MF
C431	1-162-907-11	s CAPACITOR,CERAMIC 2PF/50V(CK)
C432	1-162-907-11	s CAPACITOR,CERAMIC 2PF/50V(CK)
C501	1-162-908-11	s CAPACITOR,CERAMIC 3PF/50V 1608
C502	1-162-908-11	s CAPACITOR,CERAMIC 3PF/50V 1608
C503	1-115-416-11	s CAPACITOR,CERAMIC 1000PF/25V
C504	1-115-416-11	s CAPACITOR,CERAMIC 1000PF/25V
C505	1-165-176-11	s CAPACITOR,CERAMIC 47000PF/16V
C506	1-165-176-11	s CAPACITOR,CERAMIC 47000PF/16V
C507	1-162-925-11	s CAPACITOR,CERAMIC 68PF/50V CH
C508	1-162-925-11	s CAPACITOR,CERAMIC 68PF/50V CH
C509	1-109-982-11	s CAPACITOR,CHIP CERAMIC 1MF/10V
C510	1-109-982-11	s CAPACITOR,CHIP CERAMIC 1MF/10V
C511	1-137-739-11	s CAPACITOR, TANTALUM ELECT
C512	1-137-739-11	s CAPACITOR, TANTALUM ELECT
C513	1-165-848-11	s CAPACITOR,TANTALUM ELECT 10MF
C514	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C515	1-109-982-11	s CAPACITOR,CHIP CERAMIC 1MF/10V
C516	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C517	1-109-982-11	s CAPACITOR,CHIP CERAMIC 1MF/10V
C518	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C519	1-165-848-11	s CAPACITOR,TANTALUM ELECT 10MF
C520	1-137-703-91	s CAPACITOR, TANTALUM 1MF(3216)
C521	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C522	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C523	1-137-703-91	s CAPACITOR, TANTALUM 1MF(3216)

(DPR-224 BOARD)

Ref. No. or Q ty	Part No.	SP Description
C524	1-165-848-11	s CAPACITOR,TANTALUM ELECT 10MF
C601	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C602	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C603	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C604	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C605	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C606	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C607	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C608	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C609	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C610	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C611	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C612	1-165-848-11	s CAPACITOR,TANTALUM ELECT 10MF
C701	1-164-315-11	s CAPACITOR,CERAMIC 470PF/50V CH
C702	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C801	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C802	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C803	1-137-740-91	s CAP, TANTALUM ELECT 47MF(3528)
C804	1-137-740-91	s CAP, TANTALUM ELECT 47MF(3528)
C805	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C806	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C807	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C808	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C809	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C810	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C811	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C812	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C813	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C814	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C815	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C816	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C817	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C818	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C819	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C820	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C821	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C822	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C901	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C902	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C903	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C904	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C905	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C906	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C907	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C908	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C909	1-104-851-11	s CAPACITOR,TANTALUM 10MF/10V
C910	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C911	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C912	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C913	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C914	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C915	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C917	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C918	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C919	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C920	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C921	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C922	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C923	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF

(DPR-224 BOARD)

Ref. No. or Q ty	Part No.	SP Description
C924	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C925	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C926	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C927	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C930	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C931	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C932	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C933	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C934	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C935	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C936	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C937	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C938	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C939	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C940	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C941	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C942	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C943	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C944	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C945	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C1003	1-137-689-91	s CAPACITOR TANTALUM ELECT 47MF
C1004	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C1005	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C1006	1-137-689-91	s CAPACITOR TANTALUM ELECT 47MF
C1007	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C1008	1-126-394-11	s CAPACITOR,ELECT 10MF/16V(CHIP)
C1009	1-126-394-11	s CAPACITOR,ELECT 10MF/16V(CHIP)
C1010	1-126-394-11	s CAPACITOR,ELECT 10MF/16V(CHIP)
C1011	1-126-394-11	s CAPACITOR,ELECT 10MF/16V(CHIP)
C1012	1-162-927-11	s CAPACITOR,CERAMIC 100PF/50V CH
C1013	1-162-927-11	s CAPACITOR,CERAMIC 100PF/50V CH
C1014	1-162-927-11	s CAPACITOR,CERAMIC 100PF/50V CH
C1015	1-162-927-11	s CAPACITOR,CERAMIC 100PF/50V CH
C1016	1-128-416-11	s CAPACITOR ELECT 100MF/16V(105C
C1024	1-162-964-11	s CAPACITOR,CERAMIC 1000PF/50V B
C1031	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C1040	1-126-398-11	s CAPACITOR ELECT 4.7MF/35V(CHIP
C1041	1-165-176-11	s CAPACITOR,CERAMIC 47000PF/16V
C1042	1-165-176-11	s CAPACITOR,CERAMIC 47000PF/16V
C1043	1-128-416-11	s CAPACITOR ELECT 100MF/16V(105C
C1101	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C1102	1-162-970-11	s CAPACITOR CERAMIC 0.01MF/25V B
C1103	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C1104	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C1105	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C1106	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C1107	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C1108	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C1109	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C1110	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C1111	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C1112	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C1113	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C1114	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C1115	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C1116	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C1117	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C1118	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C1119	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF

(DPR-224 BOARD)

Ref. No. or Q ty	Part No.	SP Description
C1120	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C1121	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C1122	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C1201	1-162-925-11	s CAPACITOR,CERAMIC 68PF/50V CH
C1202	1-126-396-11	s CAPACITOR,ELECT 47MF/16V(CHIP)
C1203	1-126-394-11	s CAPACITOR,ELECT 10MF/16V(CHIP)
C1204	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C1205	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C1206	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C1207	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C1208	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C1209	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C1210	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C1211	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C1212	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C1301	1-162-917-11	s CAPACITOR,CERAMIC 15PF/50V CH
C1302	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C1303	1-162-917-11	s CAPACITOR,CERAMIC 15PF/50V CH
C1304	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C1305	1-137-740-91	s CAP, TANTALUM ELECT 47MF(3528)
C1308	1-162-964-11	s CAPACITOR,CERAMIC 1000PF/50V B
C1309	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C1310	1-162-964-11	s CAPACITOR,CERAMIC 1000PF/50V B
C1311	1-165-176-11	s CAPACITOR,CERAMIC 47000PF/16V
C1312	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C1313	1-162-964-11	s CAPACITOR,CERAMIC 1000PF/50V B
C1314	1-162-927-11	s CAPACITOR,CERAMIC 100PF/50V CH
C1315	1-125-889-11	s CAPACITOR, C.CERAMIC 2.2MF
C1316	1-162-964-11	s CAPACITOR,CERAMIC 1000PF/50V B
C1317	1-162-964-11	s CAPACITOR,CERAMIC 1000PF/50V B
C1318	1-165-176-11	s CAPACITOR,CERAMIC 47000PF/16V
C1319	1-162-964-11	s CAPACITOR,CERAMIC 1000PF/50V B
C1320	1-125-889-11	s CAPACITOR, C.CERAMIC 2.2MF
C1321	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C1322	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C1323	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C1324	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C1325	1-137-740-91	s CAP, TANTALUM ELECT 47MF(3528)
C1326	1-162-927-11	s CAPACITOR,CERAMIC 100PF/50V CH
C1327	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C1328	1-162-964-11	s CAPACITOR,CERAMIC 1000PF/50V B
C1329	1-162-964-11	s CAPACITOR,CERAMIC 1000PF/50V B
C1330	1-165-176-11	s CAPACITOR,CERAMIC 47000PF/16V
C1331	1-162-964-11	s CAPACITOR,CERAMIC 1000PF/50V B
C1332	1-125-889-11	s CAPACITOR, C.CERAMIC 2.2MF
C1333	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C1334	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C1335	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C1336	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C1337	1-137-740-91	s CAP, TANTALUM ELECT 47MF(3528)
C1338	1-119-751-11	s CAPACITOR,TANTALUM 22MF/16V
C1339	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C1340	1-162-920-11	s CAPACITOR,CERAMIC 27PF/50V CH
C1341	1-162-921-11	s CAPACITOR,CERAMIC 33PF/50V CH
C1342	1-164-230-11	s CAPACITOR,CERAMIC 220PF/50V
C1343	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C1344	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C1345	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C1346	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF

(DPR-224 BOARD)

Ref. No. or Q ty	Part No.	SP Description
C2929	1-107-826-11 s	CAPACITOR,CHIP CERAMIC 0.1MF
C2930	1-125-837-11 s	CAPACITOR,CHIP CERAMIC1MF/6.3V
C2934	1-162-927-11 s	CAPACITOR,CERAMIC 100PF/50V CH
C2935	1-162-927-11 s	CAPACITOR,CERAMIC 100PF/50V CH
C2936	1-162-927-11 s	CAPACITOR,CERAMIC 100PF/50V CH
C2937	1-164-217-11 s	CAPACITOR,CERAMIC 150PF/50V CH
C2938	1-164-217-11 s	CAPACITOR,CERAMIC 150PF/50V CH
C2939	1-164-217-11 s	CAPACITOR,CERAMIC 150PF/50V CH
C2940	1-164-217-11 s	CAPACITOR,CERAMIC 150PF/50V CH
C2941	1-164-217-11 s	CAPACITOR,CERAMIC 150PF/50V CH
C2942	1-164-217-11 s	CAPACITOR,CERAMIC 150PF/50V CH
C2943	1-107-826-11 s	CAPACITOR,CHIP CERAMIC 0.1MF
C2944	1-107-826-11 s	CAPACITOR,CHIP CERAMIC 0.1MF
C2945	1-107-826-11 s	CAPACITOR,CHIP CERAMIC 0.1MF
C2946	1-107-826-11 s	CAPACITOR,CHIP CERAMIC 0.1MF
C2947	1-107-826-11 s	CAPACITOR,CHIP CERAMIC 0.1MF
C2948	1-107-826-11 s	CAPACITOR,CHIP CERAMIC 0.1MF
C2949	1-107-826-11 s	CAPACITOR,CHIP CERAMIC 0.1MF
C2950	1-137-740-91 s	CAP, TANTALUM ELECT 47MF(3528)
C2951	1-107-826-11 s	CAPACITOR,CHIP CERAMIC 0.1MF
C2952	1-107-826-11 s	CAPACITOR,CHIP CERAMIC 0.1MF
C2953	1-107-826-11 s	CAPACITOR,CHIP CERAMIC 0.1MF
C2954	1-107-826-11 s	CAPACITOR,CHIP CERAMIC 0.1MF
C2955	1-107-826-11 s	CAPACITOR,CHIP CERAMIC 0.1MF
C2956	1-107-826-11 s	CAPACITOR,CHIP CERAMIC 0.1MF
C2957	1-107-826-11 s	CAPACITOR,CHIP CERAMIC 0.1MF
C2958	1-107-826-11 s	CAPACITOR,CHIP CERAMIC 0.1MF
C2959	1-107-826-11 s	CAPACITOR,CHIP CERAMIC 0.1MF
C2960	1-107-826-11 s	CAPACITOR,CHIP CERAMIC 0.1MF
C2961	1-107-826-11 s	CAPACITOR,CHIP CERAMIC 0.1MF
C2962	1-107-826-11 s	CAPACITOR,CHIP CERAMIC 0.1MF
C2963	1-137-740-91 s	CAP, TANTALUM ELECT 47MF(3528)
C2964	1-107-826-11 s	CAPACITOR,CHIP CERAMIC 0.1MF
C2965	1-107-826-11 s	CAPACITOR,CHIP CERAMIC 0.1MF
C2966	1-137-740-91 s	CAP, TANTALUM ELECT 47MF(3528)
C2967	1-107-826-11 s	CAPACITOR,CHIP CERAMIC 0.1MF
C2968	1-137-740-91 s	CAP, TANTALUM ELECT 47MF(3528)
C2969	1-107-826-11 s	CAPACITOR,CHIP CERAMIC 0.1MF
C2970	1-107-826-11 s	CAPACITOR,CHIP CERAMIC 0.1MF
C2971	1-107-826-11 s	CAPACITOR,CHIP CERAMIC 0.1MF
C2972	1-107-826-11 s	CAPACITOR,CHIP CERAMIC 0.1MF
C2973	1-107-826-11 s	CAPACITOR,CHIP CERAMIC 0.1MF
C2974	1-107-826-11 s	CAPACITOR,CHIP CERAMIC 0.1MF
C2975	1-107-826-11 s	CAPACITOR,CHIP CERAMIC 0.1MF
C2976	1-107-826-11 s	CAPACITOR,CHIP CERAMIC 0.1MF
C2978	1-107-826-11 s	CAPACITOR,CHIP CERAMIC 0.1MF
C2979	1-107-826-11 s	CAPACITOR,CHIP CERAMIC 0.1MF
C2980	1-107-826-11 s	CAPACITOR,CHIP CERAMIC 0.1MF
C2981	1-107-826-11 s	CAPACITOR,CHIP CERAMIC 0.1MF
C2982	1-107-826-11 s	CAPACITOR,CHIP CERAMIC 0.1MF
C2984	1-107-826-11 s	CAPACITOR,CHIP CERAMIC 0.1MF
C2986	1-107-826-11 s	CAPACITOR,CHIP CERAMIC 0.1MF
C2987	1-107-826-11 s	CAPACITOR,CHIP CERAMIC 0.1MF
C2988	1-107-826-11 s	CAPACITOR,CHIP CERAMIC 0.1MF
C2989	1-107-826-11 s	CAPACITOR,CHIP CERAMIC 0.1MF
CN1	1-794-817-11 o	CONNECTOR, COAXIAL (BNC TYPE)
CN3	1-774-966-11 o	CONNECTOR, BNC (RECEPTACLE)
CN6	1-766-431-21 o	HOUSING, CONNECTOR 30P
CN7	1-785-921-11 s	JACK (DIA. 3.5), SMALL

(DPR-224 BOARD)

Ref. No. or Q ty	Part No.	SP Description
CN100	1-766-431-21 o	HOUSING, CONNECTOR 30P
CN101	1-766-431-21 o	HOUSING, CONNECTOR 30P
CN102	1-794-227-11 o	PIN, CONNECTOR 24P
CN103	1-580-838-11 o	PIN,CONNECTOR (PC BOARD) 4P
CN104	1-695-320-21 o	PIN, CONNECTOR(1.5MM)SMD 2P
CN200	1-766-431-21 o	HOUSING, CONNECTOR 30P
CN201	1-766-431-21 o	HOUSING, CONNECTOR 30P
CN1003	1-794-848-21 o	CONNECTOR,BOARD TO CABLE(4 PIN
CN1101	1-784-086-11 o	PIN, CONNECTOR (PC BOARD) 15P
CN2001	1-580-057-11 o	PIN,CONNECTOR 4P
CN2002	1-784-086-11 o	PIN, CONNECTOR (PC BOARD) 15P
CN2101	1-770-677-11 o	CONNECTOR,BOARD TO BOARD 50P
CN2201	1-565-709-12 o	CONNECTOR, MULTIPLE 40P
CN2202	1-565-709-12 o	CONNECTOR, MULTIPLE 40P
CN2203	1-778-386-11 o	HOUSING, CONNECTOR 16P
CN2401	1-817-382-11 s	CONNECTOR, I-LINK (6P)
CN2501	1-815-923-11 s	CONNECTOR,BOARD TO BOARD 80P
CT2001	1-141-322-11 s	CAPACITOR,VAR,TRIMMER
D1	8-719-041-39 s	DIODE KV1470 (5MA)
D401	8-719-071-10 s	DIODE CL-191HR-CD-T
D501	8-719-941-23 s	DIODE DA204U
D502	8-719-941-23 s	DIODE DA204U
D1002	8-719-941-23 s	DIODE DA204U
D1003	8-719-941-23 s	DIODE DA204U
D1004	8-719-801-78 s	DIODE 1SS184
D1005	8-719-941-23 s	DIODE DA204U
D1301	8-719-041-39 s	DIODE KV1470 (5MA)
D1302	8-719-027-95 s	DIODE HSM88WK
D1303	8-719-041-39 s	DIODE KV1470 (5MA)
D1304	8-719-027-95 s	DIODE HSM88WK
D1305	8-719-041-39 s	DIODE KV1470 (5MA)
D1306	8-719-027-95 s	DIODE HSM88WK
D1307	8-719-941-23 s	DIODE DA204U
D1308	8-719-941-23 s	DIODE DA204U
D1309	8-719-027-95 s	DIODE HSM88WK
D1310	8-719-041-39 s	DIODE KV1470 (5MA)
D1311	8-719-801-78 s	DIODE 1SS184
D1501	8-719-041-39 s	DIODE KV1470 (5MA)
D1601	8-719-064-52 s	DIODE CL-191YG-CD-T
D1602	8-719-064-52 s	DIODE CL-191YG-CD-T
D1603	8-719-064-52 s	DIODE CL-191YG-CD-T
D1604	8-719-064-52 s	DIODE CL-191YG-CD-T
D1605	8-719-064-52 s	DIODE CL-191YG-CD-T
D1606	8-719-064-52 s	DIODE CL-191YG-CD-T
D1607	8-719-064-52 s	DIODE CL-191YG-CD-T
D1608	8-719-064-52 s	DIODE CL-191YG-CD-T
D2201	8-719-064-52 s	DIODE CL-191YG-CD-T
D2202	8-719-064-52 s	DIODE CL-191YG-CD-T
D2901	8-719-041-39 s	DIODE KV1470 (5MA)
D2902	8-719-041-39 s	DIODE KV1470 (5MA)
D2903	8-719-041-39 s	DIODE KV1470 (5MA)
FB101	1-414-864-11 s	INDUCTOR, MICRO (CHIP TYPE)
FB102	1-414-864-11 s	INDUCTOR, MICRO (CHIP TYPE)
FB103	1-414-864-11 s	INDUCTOR, MICRO (CHIP TYPE)
FB104	1-469-094-11 s	FERRITE, EMI (SMD)
FB105	1-469-094-11 s	FERRITE, EMI (SMD)
FB106	1-469-094-11 s	FERRITE, EMI (SMD)

(DPR-224 BOARD)

Ref. No. or Q ty	Part No.	SP Description
FB401	1-414-864-11	s INDUCTOR, MICRO (CHIP TYPE)
FB402	1-414-864-11	s INDUCTOR, MICRO (CHIP TYPE)
FB403	1-414-864-11	s INDUCTOR, MICRO (CHIP TYPE)
FB404	1-414-864-11	s INDUCTOR, MICRO (CHIP TYPE)
FB405	1-414-864-11	s INDUCTOR, MICRO (CHIP TYPE)
FB1101	1-469-140-11	s FERRITE, EMI (SMD)
FB2001	1-469-094-11	s FERRITE, EMI (SMD)
FB2002	1-469-094-11	s FERRITE, EMI (SMD)
FB2101	1-469-094-11	s FERRITE, EMI (SMD)
FB2201	1-469-094-11	s FERRITE, EMI (SMD)
FB2202	1-469-094-11	s FERRITE, EMI (SMD)
FB2203	1-469-094-11	s FERRITE, EMI (SMD)
FB2601	1-469-094-11	s FERRITE, EMI (SMD)
FL501	1-239-896-12	s FILTER, EMI (SMD)
FL502	1-239-896-12	s FILTER, EMI (SMD)
FL503	1-239-896-12	s FILTER, EMI (SMD)
FL504	1-239-896-12	s FILTER, EMI (SMD)
FL2201	1-234-489-11	s FILTER, EMI
FL2202	1-234-489-11	s FILTER, EMI
FL2203	1-234-489-11	s FILTER, EMI
IC101	8-752-078-34	s IC CXB1342R
IC102	8-759-533-85	s IC L88M05T-FA-TL
IC103	8-759-533-85	s IC L88M05T-FA-TL
IC201	8-759-481-08	s IC TC7SET02FU (TE85R)
IC202	8-759-567-31	s IC PLL1700E/2K
IC203	8-759-271-86	s IC TC7SH04FU
IC204	8-759-524-32	s IC TC74VHC367FT (EL)
IC205	8-759-524-50	s IC TC74VHC541FT (EL)
IC206	8-759-524-50	s IC TC74VHC541FT (EL)
IC207	8-759-524-50	s IC TC74VHC541FT (EL)
IC208	8-759-524-50	s IC TC74VHC541FT (EL)
IC301	8-759-650-01	s IC CXD9125R
IC401	8-752-078-32	s IC CXB1341R
IC501	8-759-471-28	s IC MAX843ISA-T
IC502	6-701-449-01	s IC SN75107ANSR
IC503	8-759-177-02	s IC NJM2267M
IC601	8-759-447-77	s IC TC7WH74FU (TE12R)
IC602	8-759-524-32	s IC TC74VHC367FT (EL)
IC603	8-759-524-32	s IC TC74VHC367FT (EL)
IC604	8-759-679-36	s IC TC7WT125FU (TE12R)
IC605	8-759-679-36	s IC TC7WT125FU (TE12R)
IC606	8-759-679-36	s IC TC7WT125FU (TE12R)
IC607	8-759-669-75	s IC TLC2932IPWR
IC608	8-759-669-75	s IC TLC2932IPWR
IC701	8-759-497-44	s IC TC7WH125FU (TE12R)
IC802	8-749-018-41	s IC SI-3025LSA-TL
IC901	8-759-271-86	s IC TC7SH04FU
IC902	8-759-490-41	s IC TC74VHCT541AFT (EL)
IC903	8-759-490-41	s IC TC74VHCT541AFT (EL)
IC904	8-759-271-86	s IC TC7SH04FU
IC905	8-759-490-41	s IC TC74VHCT541AFT (EL)
IC906	8-759-490-41	s IC TC74VHCT541AFT (EL)
IC907	8-759-271-86	s IC TC7SH04FU
IC908	8-759-271-86	s IC TC7SH04FU
IC909	8-759-490-41	s IC TC74VHCT541AFT (EL)
IC910	8-759-490-41	s IC TC74VHCT541AFT (EL)
IC911	8-759-490-41	s IC TC74VHCT541AFT (EL)
IC912	8-759-490-41	s IC TC74VHCT541AFT (EL)

(DPR-224 BOARD)

Ref. No. or Q ty	Part No.	SP Description
IC913	8-759-326-71	s IC CXD8517Q
IC914	8-759-326-71	s IC CXD8517Q
IC916	8-759-490-41	s IC TC74VHCT541AFT (EL)
IC917	8-759-490-41	s IC TC74VHCT541AFT (EL)
IC918	8-759-490-41	s IC TC74VHCT541AFT (EL)
IC919	8-759-326-71	s IC CXD8517Q
IC920	8-759-326-71	s IC CXD8517Q
IC921	8-759-490-41	s IC TC74VHCT541AFT (EL)
IC922	8-759-490-41	s IC TC74VHCT541AFT (EL)
IC925	8-759-549-20	s IC SN74LV541APWR
IC926	8-759-326-71	s IC CXD8517Q
IC927	8-759-326-71	s IC CXD8517Q
IC928	8-759-326-71	s IC CXD8517Q
IC929	8-759-326-71	s IC CXD8517Q
IC931	8-759-524-50	s IC TC74VHC541FT (EL)
IC932	8-759-524-50	s IC TC74VHC541FT (EL)
IC933	8-759-271-86	s IC TC7SH04FU
IC1003	8-759-536-23	s IC AK4324-VF-E2
IC1004	8-759-711-85	s IC NJM4580E-D
IC1101	6-700-871-01	s IC TMS320DA150GGUR120
IC1102	6-700-871-01	s IC TMS320DA150GGUR120
IC1103	8-759-491-46	s IC TC74VHCT04AFT (EL)
IC1104	8-759-524-28	s IC TC74VHC245FT (EL)
IC1201	8-759-664-03	s IC LP3964EMPX-ADJ
IC1202	6-700-871-01	s IC TMS320DA150GGUR120
IC1203	8-759-546-74	s IC TC7WH157FU (TE12R)
IC1301	8-759-271-88	s IC TC7SHU04FU
IC1302	8-759-549-15	s IC SN74LV245APWR
IC1305	8-759-196-96	s IC TC7SH08FU (TE85R)
IC1306	8-759-271-86	s IC TC7SH04FU
IC1307	8-752-378-75	s IC CXD3106R
IC1308	8-759-196-96	s IC TC7SH08FU (TE85R)
IC1309	8-752-378-75	s IC CXD3106R
IC1310	8-759-987-27	s IC LM1881M
IC1311	8-759-702-08	s IC NJM360M
IC1312	8-752-335-47	s IC CXD1216M
IC1313	8-759-564-49	s IC TC7W53FU-TE12R
IC1314	8-759-564-49	s IC TC7W53FU-TE12R
IC1315	8-759-546-74	s IC TC7WH157FU (TE12R)
IC1316	8-759-278-58	s IC NJM4558V (TE2)
IC1317	8-759-523-97	s IC TC74VHC123AFT (EL)
IC1318	8-759-523-95	s IC TC74VHC74FT (EL)
IC1319	8-759-546-74	s IC TC7WH157FU (TE12R)
IC1320	8-759-271-86	s IC TC7SH04FU
IC1321	8-759-271-88	s IC TC7SHU04FU
IC1322	8-759-271-86	s IC TC7SH04FU
IC1323	8-759-490-41	s IC TC74VHCT541AFT (EL)
IC1324	8-759-485-79	s IC TC7SET08FU (TE85L)
IC1325	8-759-485-79	s IC TC7SET08FU (TE85L)
IC1326	8-759-369-73	s IC NJM4556AM
IC1401	8-749-018-41	s IC SI-3025LSA-TL
IC1402	8-759-679-79	s IC CXD9141R
IC1403	8-759-546-74	s IC TC7WH157FU (TE12R)
IC1404	8-759-447-77	s IC TC7WH74FU (TE12R)
IC1405	8-759-386-25	s IC 74LCX245MTCX
IC1406	8-759-647-49	s IC AL422B-TEL
IC1407	8-759-386-25	s IC 74LCX245MTCX
IC1408	6-702-238-11	s IC HY57V643220CT-7TR
IC1409	8-759-647-49	s IC AL422B-TEL

(DPR-224 BOARD)

Ref. No. or Q ty	Part No.	SP Description
IC1410	8-749-018-41	s IC SI-3025LSA-TL
IC1411	8-759-271-86	s IC TC7SH04FU
IC1412	8-759-447-77	s IC TC7WH74FU (TE12R)
IC1413	8-759-679-79	s IC CXD9141R
IC1415	8-759-447-77	s IC TC7WH74FU (TE12R)
IC1417	8-759-386-25	s IC 74LCX245MTCX
IC1418	8-759-386-25	s IC 74LCX245MTCX
IC1421	6-702-238-11	s IC HY57V643220CT-7TR
IC1501	8-759-524-50	s IC TC74VHC541FT (EL)
IC1502	8-759-490-41	s IC TC74VHCT541AFT (EL)
IC1503	8-759-362-16	s IC CXD2913AQ
IC1504	8-759-702-02	s IC NJM062M
IC1505	8-759-679-78	s IC CXD9127R
IC1601	8-759-664-03	s IC LP3964EMPX-ADJ
IC1602	8-759-664-03	s IC LP3964EMPX-ADJ
IC1603	8-759-547-73	s IC SN74LVTH16245APW (R)
IC1604	8-759-495-92	s IC SN74LVTH16245ADGGR
IC1605	8-759-495-92	s IC SN74LVTH16245ADGGR
IC1606	8-759-495-92	s IC SN74LVTH16245ADGGR
IC1607	8-759-495-92	s IC SN74LVTH16245ADGGR
IC1608	8-759-495-92	s IC SN74LVTH16245ADGGR
IC1609	8-759-524-28	s IC TC74VHC245FT (EL)
IC1610	8-759-524-52	s IC TC74VHC541FT (EL)
IC1701	8-752-414-77	s IC CXD193AQ
IC1702	8-759-663-74	s IC HY57V161610DTC-7TR
IC1703	8-759-663-74	s IC HY57V161610DTC-7TR
IC1801	6-703-026-01	s IC UPD61051GD-LML
IC1802	8-759-589-36	s IC MB81F641642C-103LPN-B
IC1803	8-759-589-36	s IC MB81F641642C-103LPN-B
IC1901	8-759-524-50	s IC TC74VHC541FT (EL)
IC1902	8-759-490-41	s IC TC74VHCT541AFT (EL)
IC1903	8-759-362-16	s IC CXD2913AQ
IC1904	8-759-702-02	s IC NJM062M
IC1905	8-759-679-78	s IC CXD9127R
IC2001	8-759-832-05	s IC BA18BC0FP-E2
IC2002	6-702-749-01	s IC S-80928CNNB-G8Y-T2
IC2003	8-759-271-88	s IC TC7SHU04FU
IC2005	8-759-392-77	s IC SN74LVC245APW (E20)
IC2006	8-759-669-44	s IC SN74LVC74APWR-12
IC2007	8-759-549-14	s IC SN74LVC244APWR
IC2009	8-759-590-57	o IC IDT49FCT3805PY-TL
IC2013	8-759-549-14	s IC SN74LV244APWR
IC2014	8-759-271-86	s IC TC7SH04FU
IC2015	8-759-196-97	s IC TC7SH32FU (TE85R)
IC2016	8-759-196-96	s IC TC7SH08FU (TE85R)
IC2101	6-702-748-01	s IC HY57V561620BT-HDR
IC2102	6-702-748-01	s IC HY57V561620BT-HDR
IC2103	8-759-669-44	s IC SN74LVC74APWR-12
IC2104	8-759-531-92	s IC TC7WH04FU (TE12R)
IC2106	8-759-523-94	s IC TC74VHC32FT (EL)
IC2107	8-759-196-96	s IC TC7SH08FU (TE85R)
IC2108	8-759-447-77	s IC TC7WH74FU (TE12R)
IC2202	6-702-749-01	s IC S-80928CNNB-G8Y-T2
IC2205	8-759-435-08	s IC MAX314CSE-TE2
IC2207	6-701-543-01	s IC SN75C1168NS (R)
IC2208	6-701-543-01	s IC SN75C1168NS (R)
IC2209	8-759-435-08	s IC MAX314CSE-TE2
IC2210	8-759-524-04	s IC TC74VHC125FT (EL)
IC2301	8-759-495-92	s IC SN74LVTH16245ADGGR

(DPR-224 BOARD)

Ref. No. or Q ty	Part No.	SP Description
IC2302	8-759-495-92	s IC SN74LVTH16245ADGGR
IC2303	8-759-495-92	s IC SN74LVTH16245ADGGR
IC2304	8-759-495-92	s IC SN74LVTH16245ADGGR
IC2305	8-759-495-92	s IC SN74LVTH16245ADGGR
IC2307	8-759-196-93	s IC TC7SH00FU-TE85R
IC2308	8-759-495-92	s IC SN74LVTH16245ADGGR
IC2309	8-759-082-59	s IC TC7W32FU
IC2310	8-759-524-50	s IC TC74VHC541FT (EL)
IC2311	8-759-578-68	s IC SN74LVCC4245APWR
IC2312	8-759-524-52	s IC TC74VHC574FT (EL)
IC2316	8-759-058-58	s IC TC7S04FU-TE85R
IC2317	8-759-196-96	s IC TC7SH08FU (TE85R)
IC2318	8-759-271-86	s IC TC7SH04FU
IC2401	6-702-076-01	s IC TSB43AB22
IC2602	6-702-748-01	s IC HY57V561620BT-HDR
IC2603	6-702-748-01	s IC HY57V561620BT-HDR
IC2604	8-759-447-77	s IC TC7WH74FU (TE12R)
IC2605	8-759-590-57	o IC IDT49FCT3805PY-TL
IC2606	8-759-327-65	s IC CXD8525N (E2)
IC2609	8-759-327-65	s IC CXD8525N (E2)
IC2702	8-749-018-41	s IC SI-3025LSA-TL
IC2802	8-749-018-41	s IC SI-3025LSA-TL
IC2902	8-759-524-50	s IC TC74VHC541FT (EL)
IC2903	8-759-490-41	s IC TC74VHCT541AFT (EL)
IC2904	8-759-490-41	s IC TC74VHCT541AFT (EL)
IC2905	8-759-362-16	s IC CXD2913AQ
IC2906	8-759-362-16	s IC CXD2913AQ
IC2907	8-759-362-16	s IC CXD2913AQ
IC2908	8-759-702-02	s IC NJM062M
IC2909	8-759-702-02	s IC NJM062M
IC2910	8-759-702-02	s IC NJM062M
IC2911	8-759-196-97	s IC TC7SH32FU (TE85R)
IC2912	8-759-524-50	s IC TC74VHC541FT (EL)
IC2913	8-759-573-65	s IC IDT71V016S20PHAU-TL
IC2914	8-752-391-87	s IC CXD2712R
IC2915	8-759-271-86	s IC TC7SH04FU
IC2916	8-759-524-50	s IC TC74VHC541FT (EL)
IC2917	8-759-524-50	s IC TC74VHC541FT (EL)
IC2918	8-759-271-86	s IC TC7SH04FU
IC2919	8-749-018-41	s IC SI-3025LSA-TL
IC2920	8-759-524-50	s IC TC74VHC541FT (EL)
IC2921	8-759-524-50	s IC TC74VHC541FT (EL)
L101	1-410-797-11	s CHIP INDUCTOR 0.015UH (3225)
L102	1-412-939-11	s INDUCTOR 1.0UH (2520)
L201	1-412-947-11	s INDUCTOR 4.7UH (2520)
L301	1-414-398-11	s INDUCTOR (SMD) 10UH
L501	1-412-279-31	s CHIP INDUCTOR 270UH (3225)
L502	1-412-279-31	s CHIP INDUCTOR 270UH (3225)
L503	1-410-378-11	s INDUCTOR,CHIP 5.6UH (3225)
L504	1-410-378-11	s INDUCTOR,CHIP 5.6UH (3225)
L505	1-412-947-11	s INDUCTOR 4.7UH (2520)
L506	1-412-947-11	s INDUCTOR 4.7UH (2520)
L601	1-410-377-31	s INDUCTOR,CHIP 4.7UH (3225)
L801	1-414-398-11	s INDUCTOR (SMD) 10UH
L901	1-414-398-11	s INDUCTOR (SMD) 10UH
L903	1-412-939-11	s INDUCTOR 1.0UH (2520)
L904	1-412-939-11	s INDUCTOR 1.0UH (2520)
L905	1-412-939-11	s INDUCTOR 1.0UH (2520)

(DPR-224 BOARD)

Ref. No. or Q ty	Part No.	SP Description
L906	1-412-939-11	s INDUCTOR 1.0UH (2520)
L907	1-412-939-11	s INDUCTOR 1.0UH (2520)
L908	1-412-939-11	s INDUCTOR 1.0UH (2520)
L1001	1-414-400-11	s INDUCTOR, 22UH
L1002	1-414-400-11	s INDUCTOR, 22UH
L1003	1-410-377-31	s INDUCTOR,CHIP 4.7UH (3225)
L1201	1-414-400-11	s INDUCTOR, 22UH
L1301	1-414-398-11	s INDUCTOR (SMD) 10UH
L1302	1-412-182-11	s MICRO INDUCTOR 5.6UH
L1303	1-412-173-11	s MICRO INDUCTOR 0.82UH
L1304	1-414-398-11	s INDUCTOR (SMD) 10UH
L1305	1-412-173-11	s MICRO INDUCTOR 0.82UH
L1306	1-414-398-11	s INDUCTOR (SMD) 10UH
L1307	1-414-398-11	s INDUCTOR (SMD) 10UH
L1308	1-412-961-11	s INDUCTOR (SMALL TYPE) 68UH
L1309	1-412-963-11	s INDUCTOR 100UH (2520)
L1310	1-412-985-31	s INDUCTOR (SMALL TYPE) 3.30UH
L1311	1-414-398-11	s INDUCTOR (SMD) 10UH
L1401	1-414-398-11	s INDUCTOR (SMD) 10UH
L1402	1-414-398-11	s INDUCTOR (SMD) 10UH
L1403	1-414-398-11	s INDUCTOR (SMD) 10UH
L1404	1-414-398-11	s INDUCTOR (SMD) 10UH
L1405	1-414-398-11	s INDUCTOR (SMD) 10UH
L1502	1-414-398-11	s INDUCTOR (SMD) 10UH
L1503	1-414-398-11	s INDUCTOR (SMD) 10UH
L1701	1-414-398-11	s INDUCTOR (SMD) 10UH
L1702	1-414-398-11	s INDUCTOR (SMD) 10UH
L1801	1-414-398-11	s INDUCTOR (SMD) 10UH
L1802	1-414-398-11	s INDUCTOR (SMD) 10UH
L1803	1-414-398-11	s INDUCTOR (SMD) 10UH
L1902	1-414-398-11	s INDUCTOR (SMD) 10UH
L1903	1-414-398-11	s INDUCTOR (SMD) 10UH
L2001	1-414-398-11	s INDUCTOR (SMD) 10UH
L2002	1-414-406-11	s INDUCTOR (SMD) 220UH
L2401	1-414-398-11	s INDUCTOR (SMD) 10UH
L2402	1-414-398-11	s INDUCTOR (SMD) 10UH
L2403	1-469-972-21	s COIL, CHOKER
L2404	1-414-398-11	s INDUCTOR (SMD) 10UH
L2601	1-414-398-11	s INDUCTOR (SMD) 10UH
L2602	1-414-398-11	s INDUCTOR (SMD) 10UH
L2603	1-414-398-11	s INDUCTOR (SMD) 10UH
L2604	1-414-398-11	s INDUCTOR (SMD) 10UH
L2605	1-414-398-11	s INDUCTOR (SMD) 10UH
L2606	1-414-521-11	s INDUCTOR, SMALL TYPE 10.0UH
L2609	1-414-521-11	s INDUCTOR, SMALL TYPE 10.0UH
L2701	1-414-398-11	s INDUCTOR (SMD) 10UH
L2801	1-414-398-11	s INDUCTOR (SMD) 10UH
L2901	1-414-398-11	s INDUCTOR (SMD) 10UH
L2902	1-414-398-11	s INDUCTOR (SMD) 10UH
LV1501	1-411-984-11	s COIL, VARIABLE
LV1901	1-411-984-11	s COIL, VARIABLE
LV2901	1-411-984-11	s COIL, VARIABLE
LV2902	1-411-984-11	s COIL, VARIABLE
LV2903	1-411-984-11	s COIL, VARIABLE
PS101	Δ 1-576-398-21	s RINK, IC (CCP2E63)
PS102	Δ 1-576-398-21	s RINK, IC (CCP2E63)
PS103	Δ 1-576-398-21	s RINK, IC (CCP2E63)
PS104	Δ 1-576-398-21	s RINK, IC (CCP2E63)
PS105	Δ 1-576-398-21	s RINK, IC (CCP2E63)

(DPR-224 BOARD)

Ref. No. or Q ty	Part No.	SP Description
PS106	Δ 1-576-398-21	s RINK, IC (CCP2E63)
Q101	8-729-928-81	s TRANSISTOR DTC144EE
Q102	8-729-928-27	s TRANSISTOR DTA144EE
Q401	8-729-928-27	s TRANSISTOR DTA144EE
Q402	8-729-928-27	s TRANSISTOR DTA144EE
Q403	8-729-928-81	s TRANSISTOR DTC144EE
Q404	8-729-105-68	s TRANSISTOR 2SC3356-K
Q405	8-729-105-68	s TRANSISTOR 2SC3356-K
Q406	8-729-105-68	s TRANSISTOR 2SC3356-K
Q407	8-729-105-68	s TRANSISTOR 2SC3356-K
Q701	8-729-928-81	s TRANSISTOR DTC144EE
Q703	8-729-928-81	s TRANSISTOR DTC144EE
Q1001	8-729-928-27	s TRANSISTOR DTA144EE
Q1002	8-729-928-81	s TRANSISTOR DTC144EE
Q1007	8-729-928-81	s TRANSISTOR DTC144EE
Q1008	8-729-928-27	s TRANSISTOR DTA144EE
Q1010	8-729-209-07	s TRANSISTOR 2SC4213-B
Q1011	8-729-209-07	s TRANSISTOR 2SC4213-B
Q1012	8-729-928-27	s TRANSISTOR DTA144EE
Q1013	8-729-140-63	s TRANSISTOR 2SA1611-M5M6
Q1301	8-729-140-63	s TRANSISTOR 2SA1611-M5M6
Q1302	8-729-117-32	s TRANSISTOR 2SC4177
Q1303	8-729-117-32	s TRANSISTOR 2SC4177
Q1304	8-729-140-63	s TRANSISTOR 2SA1611-M5M6
Q1305	8-729-928-81	s TRANSISTOR DTC144EE
Q1306	8-729-140-63	s TRANSISTOR 2SA1611-M5M6
Q1307	8-729-140-63	s TRANSISTOR 2SA1611-M5M6
Q1308	8-729-140-63	s TRANSISTOR 2SA1611-M5M6
Q1309	8-729-928-81	s TRANSISTOR DTC144EE
Q2201	8-729-929-08	s TRANSISTOR DTC123JE
Q2202	8-729-929-08	s TRANSISTOR DTC123JE
Q2203	8-729-046-75	s TRANSISTOR SI2301DS-T1
Q2204	8-729-929-08	s TRANSISTOR DTC123JE
Q2205	8-729-046-75	s TRANSISTOR SI2301DS-T1
R101	1-216-817-11	s RESISTOR,CHIP 470 1/10W 1608
R102	1-216-817-11	s RESISTOR,CHIP 470 1/10W 1608
R103	1-216-821-11	s RESISTOR,CHIP 1.0K 1/10W(1608)
R104	1-211-990-11	s RESISTOR,CHIP 75 1/10W (1608)
R105	1-218-873-11	s RESISTOR,CHIP 12K 1/10W (1608)
R106	1-216-821-11	s RESISTOR,CHIP 1.0K 1/10W(1608)
R107	1-216-857-11	s RESISTOR,CHIP 1M 1/10W(1608)
R108	1-211-990-11	s RESISTOR,CHIP 75 1/10W (1608)
R109	1-211-990-11	s RESISTOR,CHIP 75 1/10W (1608)
R110	1-218-835-11	s RESISTOR,CHIP 330 1/10W (1608)
R111	1-218-855-11	s RESISTOR,CHIP 2.2K 1/10W(1608)
R112	1-218-855-11	s RESISTOR,CHIP 2.2K 1/10W(1608)
R113	1-216-801-11	s RESISTOR,CHIP 22 1/10W (1608)
R114	1-216-821-11	s RESISTOR,CHIP 1.0K 1/10W(1608)
R115	1-218-855-11	s RESISTOR,CHIP 2.2K 1/10W(1608)
R116	1-216-805-11	s RESISTOR,CHIP 47 1/10W 1608
R117	1-216-805-11	s RESISTOR,CHIP 47 1/10W 1608
R118	1-216-805-11	s RESISTOR,CHIP 47 1/10W 1608
R119	1-216-805-11	s RESISTOR,CHIP 47 1/10W 1608
R120	1-216-805-11	s RESISTOR,CHIP 47 1/10W 1608
R121	1-216-801-11	s RESISTOR,CHIP 22 1/10W (1608)
R122	1-216-801-11	s RESISTOR,CHIP 22 1/10W (1608)
R123	1-216-805-11	s RESISTOR,CHIP 47 1/10W 1608
R124	1-216-805-11	s RESISTOR,CHIP 47 1/10W 1608

(DPR-224 BOARD)

Ref. No. or Q ty	Part No.	SP Description
R125	1-216-805-11	s RESISTOR,CHIP 47 1/10W 1608
R128	1-216-805-11	s RESISTOR,CHIP 47 1/10W 1608
R129	1-216-805-11	s RESISTOR,CHIP 47 1/10W 1608
R201	1-216-864-11	s CONDUCTOR, CHIP (1608)
R202	1-216-864-11	s CONDUCTOR, CHIP (1608)
R203	1-216-864-11	s CONDUCTOR, CHIP (1608)
R204	1-216-864-11	s CONDUCTOR, CHIP (1608)
R205	1-216-801-11	s RESISTOR,CHIP 22 1/10W (1608)
R301	1-216-797-11	s RESISTOR,CHIP 10 1/10W 1608
R302	1-216-797-11	s RESISTOR,CHIP 10 1/10W 1608
R303	1-216-797-11	s RESISTOR,CHIP 10 1/10W 1608
R304	1-216-801-11	s RESISTOR,CHIP 22 1/10W (1608)
R305	1-216-801-11	s RESISTOR,CHIP 22 1/10W (1608)
R306	1-216-864-11	s CONDUCTOR, CHIP (1608)
R401	1-216-809-11	s RESISTOR,CHIP 100 1/10W 1608
R402	1-216-809-11	s RESISTOR,CHIP 100 1/10W 1608
R403	1-216-805-11	s RESISTOR,CHIP 47 1/10W 1608
R404	1-218-875-11	s RESISTOR,CHIP 15K 1/10W (1608)
R405	1-218-875-11	s RESISTOR,CHIP 15K 1/10W (1608)
R406	1-216-805-11	s RESISTOR,CHIP 47 1/10W 1608
R407	1-218-855-11	s RESISTOR,CHIP 2.2K 1/10W(1608)
R408	1-216-821-11	s RESISTOR,CHIP 1.0K 1/10W(1608)
R409	1-216-821-11	s RESISTOR,CHIP 1.0K 1/10W(1608)
R410	1-218-845-11	s RESISTOR,CHIP 820 1/10W (1608)
R411	1-218-873-11	s RESISTOR,CHIP 12K 1/10W (1608)
R412	1-218-855-11	s RESISTOR,CHIP 2.2K 1/10W(1608)
R413	1-216-821-11	s RESISTOR,CHIP 1.0K 1/10W(1608)
R414	1-218-855-11	s RESISTOR,CHIP 2.2K 1/10W(1608)
R415	1-216-817-11	s RESISTOR,CHIP 470 1/10W 1608
R416	1-216-817-11	s RESISTOR,CHIP 470 1/10W 1608
R417	1-216-829-11	s RESISTOR,CHIP 4.7K 1/10W(1608)
R418	1-216-817-11	s RESISTOR,CHIP 470 1/10W 1608
R420	1-218-833-11	s RESISTOR,CHIP 270 1/10W (1608)
R421	1-218-833-11	s RESISTOR,CHIP 270 1/10W (1608)
R422	1-211-985-11	s RESISTOR,CHIP 47 1/10W (1608)
R423	1-211-989-11	s RESISTOR,CHIP 68 1/10W (1608)
R424	1-211-978-11	s RESISTOR,CHIP 24 1/10W (1608)
R425	1-211-984-11	s RESISTOR,CHIP 43 1/10W (1608)
R426	1-218-829-11	s RESISTOR,CHIP 180 1/10W (1608)
R427	1-211-989-11	s RESISTOR,CHIP 68 1/10W (1608)
R428	1-211-978-11	s RESISTOR,CHIP 24 1/10W (1608)
R429	1-218-839-11	s RESISTOR,CHIP 470 1/10W (1608)
R430	1-211-985-11	s RESISTOR,CHIP 47 1/10W (1608)
R431	1-211-985-11	s RESISTOR,CHIP 47 1/10W (1608)
R432	1-211-985-11	s RESISTOR,CHIP 47 1/10W (1608)
R433	1-218-827-11	s RESISTOR,CHIP 150 1/10W (1608)
R434	1-218-827-11	s RESISTOR,CHIP 150 1/10W (1608)
R435	1-218-847-11	s RESISTOR,CHIP 1K 1/10W (1608)
R436	1-218-847-11	s RESISTOR,CHIP 1K 1/10W (1608)
R437	1-211-989-11	s RESISTOR,CHIP 68 1/10W (1608)
R438	1-211-989-11	s RESISTOR,CHIP 68 1/10W (1608)
R501	1-218-848-11	s RESISTOR,CHIP 1.1K 1/10W(1608)
R502	1-218-848-11	s RESISTOR,CHIP 1.1K 1/10W(1608)
R503	1-211-987-11	s RESISTOR,CHIP 56 1/10W (1608)
R504	1-211-987-11	s RESISTOR,CHIP 56 1/10W (1608)
R505	1-211-990-11	s RESISTOR,CHIP 75 1/10W (1608)
R506	1-211-990-11	s RESISTOR,CHIP 75 1/10W (1608)
R507	1-218-845-11	s RESISTOR,CHIP 820 1/10W (1608)
R508	1-218-845-11	s RESISTOR,CHIP 820 1/10W (1608)

(DPR-224 BOARD)

Ref. No. or Q ty	Part No.	SP Description
R509	1-211-980-11	s RESISTOR,CHIP 30 1/10W(1608)
R510	1-211-980-11	s RESISTOR,CHIP 30 1/10W(1608)
R511	1-218-829-11	s RESISTOR,CHIP 180 1/10W (1608)
R512	1-218-829-11	s RESISTOR,CHIP 180 1/10W (1608)
R513	1-218-823-11	s RESISTOR,CHIP 100 1/10W (1608)
R514	1-218-823-11	s RESISTOR,CHIP 100 1/10W (1608)
R515	1-218-834-11	s RESISTOR,CHIP 300 1/10W (1608)
R516	1-218-834-11	s RESISTOR,CHIP 300 1/10W (1608)
R517	1-218-838-11	s RESISTOR,CHIP 430 1/10W (1608)
R518	1-218-838-11	s RESISTOR,CHIP 430 1/10W (1608)
R519	1-218-823-11	s RESISTOR,CHIP 100 1/10W (1608)
R520	1-218-823-11	s RESISTOR,CHIP 100 1/10W (1608)
R521	1-218-823-11	s RESISTOR,CHIP 100 1/10W (1608)
R522	1-218-823-11	s RESISTOR,CHIP 100 1/10W (1608)
R523	1-218-847-11	s RESISTOR,CHIP 1K 1/10W (1608)
R524	1-218-847-11	s RESISTOR,CHIP 1K 1/10W (1608)
R525	1-211-990-11	s RESISTOR,CHIP 75 1/10W (1608)
R526	1-211-990-11	s RESISTOR,CHIP 75 1/10W (1608)
R527	1-216-805-11	s RESISTOR,CHIP 47 1/10W 1608
R528	1-216-805-11	s RESISTOR,CHIP 47 1/10W 1608
R529	1-218-895-11	s RESISTOR,CHIP 100K 1/10W(1608)
R530	1-218-895-11	s RESISTOR,CHIP 100K 1/10W(1608)
R601	1-218-853-11	s RESISTOR,CHIP 1.8K 1/10W(1608)
R602	1-218-853-11	s RESISTOR,CHIP 1.8K 1/10W(1608)
R603	1-218-875-11	s RESISTOR,CHIP 15K 1/10W (1608)
R604	1-218-875-11	s RESISTOR,CHIP 15K 1/10W (1608)
R605	1-218-835-11	s RESISTOR,CHIP 330 1/10W (1608)
R606	1-218-835-11	s RESISTOR,CHIP 330 1/10W (1608)
R607	1-216-801-11	s RESISTOR,CHIP 22 1/10W (1608)
R608	1-216-801-11	s RESISTOR,CHIP 22 1/10W (1608)
R701	1-218-863-11	s RESISTOR,CHIP 4.7K 1/10W(1608)
R704	1-216-841-11	s RESISTOR,CHIP 47K 1/10W 1608
R706	1-216-833-11	s RESISTOR,CHIP 10K 1/10W (1608)
R801	1-216-864-11	s CONDUCTOR, CHIP (1608)
R802	1-216-864-11	s CONDUCTOR, CHIP (1608)
R803	1-216-864-11	s CONDUCTOR, CHIP (1608)
R804	1-216-864-11	s CONDUCTOR, CHIP (1608)
R901	1-216-864-11	s CONDUCTOR, CHIP (1608)
R902	1-216-864-11	s CONDUCTOR, CHIP (1608)
R903	1-216-864-11	s CONDUCTOR, CHIP (1608)
R904	1-216-864-11	s CONDUCTOR, CHIP (1608)
R905	1-216-864-11	s CONDUCTOR, CHIP (1608)
R906	1-216-864-11	s CONDUCTOR, CHIP (1608)
R907	1-218-863-11	s RESISTOR,CHIP 4.7K 1/10W(1608)
R910	1-216-864-11	s CONDUCTOR, CHIP (1608)
R912	1-216-833-11	s RESISTOR,CHIP 10K 1/10W (1608)
R913	1-216-833-11	s RESISTOR,CHIP 10K 1/10W (1608)
R914	1-216-833-11	s RESISTOR,CHIP 10K 1/10W (1608)
R915	1-216-864-11	s CONDUCTOR, CHIP (1608)
R916	1-216-864-11	s CONDUCTOR, CHIP (1608)
R1001	1-216-833-11	s RESISTOR,CHIP 10K 1/10W (1608)
R1004	1-211-977-11	s RESISTOR,CHIP 22 1/10W (1608)
R1005	1-211-977-11	s RESISTOR,CHIP 22 1/10W (1608)
R1007	1-218-880-11	s RESISTOR,CHIP 24K 1/10W (1608)
R1008	1-218-880-11	s RESISTOR,CHIP 24K 1/10W (1608)
R1009	1-218-880-11	s RESISTOR,CHIP 24K 1/10W (1608)
R1010	1-218-880-11	s RESISTOR,CHIP 24K 1/10W (1608)
R1011	1-216-841-11	s RESISTOR,CHIP 47K 1/10W 1608
R1012	1-216-841-11	s RESISTOR,CHIP 47K 1/10W 1608

(DPR-224 BOARD)

Ref. No. or Q ty	Part No.	SP Description
R1013	1-216-841-11	s RESISTOR, CHIP 47K 1/10W 1608
R1014	1-216-841-11	s RESISTOR, CHIP 47K 1/10W 1608
R1025	1-211-989-11	s RESISTOR, CHIP 68 1/10W (1608)
R1026	1-211-989-11	s RESISTOR, CHIP 68 1/10W (1608)
R1027	1-218-863-11	s RESISTOR,CHIP 4.7K 1/10W(1608)
R1031	1-216-833-11	s RESISTOR,CHIP 10K 1/10W (1608)
R1041	1-216-805-11	s RESISTOR,CHIP 47 1/10W 1608
R1043	1-216-821-11	s RESISTOR,CHIP 1.0K 1/10W(1608)
R1045	1-216-821-11	s RESISTOR,CHIP 1.0K 1/10W(1608)
R1046	1-216-833-11	s RESISTOR,CHIP 10K 1/10W (1608)
R1047	1-218-827-11	s RESISTOR,CHIP 150 1/10W (1608)
R1103	1-216-864-11	s CONDUCTOR, CHIP (1608)
R1104	1-216-864-11	s CONDUCTOR, CHIP (1608)
R1105	1-216-797-11	s RESISTOR,CHIP 10 1/10W 1608
R1106	1-216-797-11	s RESISTOR,CHIP 10 1/10W 1608
R1107	1-216-797-11	s RESISTOR,CHIP 10 1/10W 1608
R1108	1-216-797-11	s RESISTOR,CHIP 10 1/10W 1608
R1112	1-216-864-11	s CONDUCTOR, CHIP (1608)
R1113	1-216-864-11	s CONDUCTOR, CHIP (1608)
R1114	1-216-864-11	s CONDUCTOR, CHIP (1608)
R1116	1-216-864-11	s CONDUCTOR, CHIP (1608)
R1117	1-216-864-11	s CONDUCTOR, CHIP (1608)
R1118	1-216-864-11	s CONDUCTOR, CHIP (1608)
R1119	1-216-864-11	s CONDUCTOR, CHIP (1608)
R1121	1-216-864-11	s CONDUCTOR, CHIP (1608)
R1123	1-216-829-11	s RESISTOR,CHIP 4.7K 1/10W(1608)
R1124	1-216-864-11	s CONDUCTOR, CHIP (1608)
R1125	1-216-864-11	s CONDUCTOR, CHIP (1608)
R1126	1-216-841-11	s RESISTOR, CHIP 47K 1/10W 1608
R1127	1-216-841-11	s RESISTOR, CHIP 47K 1/10W 1608
R1128	1-216-864-11	s CONDUCTOR, CHIP (1608)
R1129	1-216-864-11	s CONDUCTOR, CHIP (1608)
R1130	1-216-864-11	s CONDUCTOR, CHIP (1608)
R1131	1-216-841-11	s RESISTOR, CHIP 47K 1/10W 1608
R1133	1-216-864-11	s CONDUCTOR, CHIP (1608)
R1134	1-216-841-11	s RESISTOR, CHIP 47K 1/10W 1608
R1138	1-216-841-11	s RESISTOR, CHIP 47K 1/10W 1608
R1139	1-216-864-11	s CONDUCTOR, CHIP (1608)
R1140	1-216-864-11	s CONDUCTOR, CHIP (1608)
R1143	1-216-864-11	s CONDUCTOR, CHIP (1608)
R1144	1-216-829-11	s RESISTOR,CHIP 4.7K 1/10W(1608)
R1146	1-216-841-11	s RESISTOR, CHIP 47K 1/10W 1608
R1147	1-216-864-11	s CONDUCTOR, CHIP (1608)
R1148	1-216-841-11	s RESISTOR, CHIP 47K 1/10W 1608
R1152	1-216-841-11	s RESISTOR, CHIP 47K 1/10W 1608
R1153	1-216-841-11	s RESISTOR, CHIP 47K 1/10W 1608
R1156	1-216-864-11	s CONDUCTOR, CHIP (1608)
R1157	1-216-864-11	s CONDUCTOR, CHIP (1608)
R1158	1-216-864-11	s CONDUCTOR, CHIP (1608)
R1159	1-216-864-11	s CONDUCTOR, CHIP (1608)
R1161	1-216-864-11	s CONDUCTOR, CHIP (1608)
R1163	1-216-829-11	s RESISTOR,CHIP 4.7K 1/10W(1608)
R1164	1-216-864-11	s CONDUCTOR, CHIP (1608)
R1165	1-216-864-11	s CONDUCTOR, CHIP (1608)
R1166	1-216-841-11	s RESISTOR, CHIP 47K 1/10W 1608
R1167	1-216-841-11	s RESISTOR, CHIP 47K 1/10W 1608
R1168	1-216-864-11	s CONDUCTOR, CHIP (1608)
R1169	1-216-864-11	s CONDUCTOR, CHIP (1608)
R1170	1-216-864-11	s CONDUCTOR, CHIP (1608)

(DPR-224 BOARD)

Ref. No. or Q ty	Part No.	SP Description
R1171	1-216-841-11	s RESISTOR, CHIP 47K 1/10W 1608
R1173	1-216-864-11	s CONDUCTOR, CHIP (1608)
R1174	1-216-841-11	s RESISTOR, CHIP 47K 1/10W 1608
R1176	1-216-864-11	s CONDUCTOR, CHIP (1608)
R1178	1-216-841-11	s RESISTOR, CHIP 47K 1/10W 1608
R1179	1-216-864-11	s CONDUCTOR, CHIP (1608)
R1180	1-216-864-11	s CONDUCTOR, CHIP (1608)
R1183	1-216-829-11	s RESISTOR,CHIP 4.7K 1/10W(1608)
R1184	1-216-864-11	s CONDUCTOR, CHIP (1608)
R1186	1-216-841-11	s RESISTOR, CHIP 47K 1/10W 1608
R1187	1-216-864-11	s CONDUCTOR, CHIP (1608)
R1188	1-216-841-11	s RESISTOR, CHIP 47K 1/10W 1608
R1189	1-216-841-11	s RESISTOR, CHIP 47K 1/10W 1608
R1194	1-216-841-11	s RESISTOR, CHIP 47K 1/10W 1608
R1195	1-216-864-11	s CONDUCTOR, CHIP (1608)
R1201	1-216-833-11	s RESISTOR,CHIP 10K 1/10W (1608)
R1202	1-216-833-11	s RESISTOR,CHIP 10K 1/10W (1608)
R1203	1-216-813-11	s RESISTOR,CHIP 220 1/10W 1608
R1204	1-216-825-11	s RESISTOR,CHIP 2.2K 1/10W 1608
R1206	1-216-841-11	s RESISTOR, CHIP 47K 1/10W 1608
R1213	1-216-829-11	s RESISTOR,CHIP 4.7K 1/10W(1608)
R1214	1-216-864-11	s CONDUCTOR, CHIP (1608)
R1215	1-216-841-11	s RESISTOR, CHIP 47K 1/10W 1608
R1217	1-216-841-11	s RESISTOR, CHIP 47K 1/10W 1608
R1223	1-216-841-11	s RESISTOR, CHIP 47K 1/10W 1608
R1227	1-216-841-11	s RESISTOR, CHIP 47K 1/10W 1608
R1233	1-216-829-11	s RESISTOR,CHIP 4.7K 1/10W(1608)
R1234	1-216-841-11	s RESISTOR, CHIP 47K 1/10W 1608
R1235	1-216-841-11	s RESISTOR, CHIP 47K 1/10W 1608
R1236	1-216-841-11	s RESISTOR, CHIP 47K 1/10W 1608
R1237	1-216-841-11	s RESISTOR, CHIP 47K 1/10W 1608
R1238	1-216-841-11	s RESISTOR, CHIP 47K 1/10W 1608
R1239	1-216-864-11	s CONDUCTOR, CHIP (1608)
R1301	1-216-857-11	s RESISTOR,CHIP 1M 1/10W(1608)
R1302	1-216-801-11	s RESISTOR,CHIP 22 1/10W (1608)
R1304	1-216-833-11	s RESISTOR,CHIP 10K 1/10W (1608)
R1305	1-216-829-11	s RESISTOR,CHIP 4.7K 1/10W(1608)
R1306	1-216-833-11	s RESISTOR,CHIP 10K 1/10W (1608)
R1307	1-216-805-11	s RESISTOR,CHIP 47 1/10W 1608
R1308	1-216-815-11	s RESISTOR,CHIP 330 1/10W 1608
R1309	1-216-857-11	s RESISTOR,CHIP 1M 1/10W(1608)
R1310	1-216-864-11	s CONDUCTOR, CHIP (1608)
R1311	1-216-833-11	s RESISTOR,CHIP 10K 1/10W (1608)
R1312	1-216-829-11	s RESISTOR,CHIP 4.7K 1/10W(1608)
R1313	1-216-833-11	s RESISTOR,CHIP 10K 1/10W (1608)
R1314	1-216-845-11	s RESISTOR,CHIP 100K 1/10W(1608)
R1315	1-216-805-11	s RESISTOR,CHIP 47 1/10W 1608
R1316	1-216-845-11	s RESISTOR,CHIP 100K 1/10W(1608)
R1317	1-216-817-11	s RESISTOR,CHIP 470 1/10W 1608
R1318	1-216-845-11	s RESISTOR,CHIP 100K 1/10W(1608)
R1319	1-216-845-11	s RESISTOR,CHIP 100K 1/10W(1608)
R1320	1-216-801-11	s RESISTOR,CHIP 22 1/10W (1608)
R1321	1-216-801-11	s RESISTOR,CHIP 22 1/10W (1608)
R1322	1-216-801-11	s RESISTOR,CHIP 22 1/10W (1608)
R1323	1-216-801-11	s RESISTOR,CHIP 22 1/10W (1608)
R1324	1-216-801-11	s RESISTOR,CHIP 22 1/10W (1608)
R1325	1-216-801-11	s RESISTOR,CHIP 22 1/10W (1608)
R1326	1-216-801-11	s RESISTOR,CHIP 22 1/10W (1608)
R1327	1-216-797-11	s RESISTOR,CHIP 10 1/10W 1608

(DPR-224 BOARD)

Ref. No. or Q ty	Part No.	SP Description
R1328	1-216-801-11	s RESISTOR,CHIP 22 1/10W (1608)
R1329	1-216-833-11	s RESISTOR,CHIP 10K 1/10W (1608)
R1330	1-216-829-11	s RESISTOR,CHIP 4.7K 1/10W(1608)
R1331	1-216-833-11	s RESISTOR,CHIP 10K 1/10W (1608)
R1332	1-216-857-11	s RESISTOR,CHIP 1M 1/10W(1608)
R1333	1-216-805-11	s RESISTOR,CHIP 47 1/10W 1608
R1334	1-216-817-11	s RESISTOR,CHIP 470 1/10W 1608
R1335	1-216-845-11	s RESISTOR,CHIP 100K 1/10W(1608)
R1336	1-216-845-11	s RESISTOR,CHIP 100K 1/10W(1608)
R1337	1-216-845-11	s RESISTOR,CHIP 100K 1/10W(1608)
R1338	1-216-845-11	s RESISTOR,CHIP 100K 1/10W(1608)
R1339	1-216-864-11	s CONDUCTOR, CHIP (1608)
R1340	1-216-797-11	s RESISTOR,CHIP 10 1/10W 1608
R1341	1-211-990-11	s RESISTOR,CHIP 75 1/10W (1608)
R1342	1-218-857-11	s RESISTOR,CHIP 2.7K 1/10W(1608)
R1343	1-218-845-11	s RESISTOR,CHIP 820 1/10W (1608)
R1344	1-216-821-11	s RESISTOR,CHIP 1.0K 1/10W(1608)
R1345	1-218-857-11	s RESISTOR,CHIP 2.7K 1/10W(1608)
R1346	1-218-857-11	s RESISTOR,CHIP 2.7K 1/10W(1608)
R1347	1-216-821-11	s RESISTOR,CHIP 1.0K 1/10W(1608)
R1348	1-216-855-11	s RESISTOR, CHIP 680K 1/10W 1608
R1349	1-216-821-11	s RESISTOR,CHIP 1.0K 1/10W(1608)
R1350	1-216-843-11	s RESISTOR,CHIP 68K 1/10W (1608)
R1351	1-216-821-11	s RESISTOR,CHIP 1.0K 1/10W(1608)
R1353	1-218-883-11	s RESISTOR,CHIP 33K 1/10W (1608)
R1354	1-218-875-11	s RESISTOR,CHIP 15K 1/10W (1608)
R1355	1-218-875-11	s RESISTOR,CHIP 15K 1/10W (1608)
R1356	1-216-837-11	s RESISTOR,CHIP 22K 1/16W 1608
R1358	1-216-817-11	s RESISTOR,CHIP 470 1/10W 1608
R1359	1-218-879-11	s RESISTOR,CHIP 22K 1/10W (1608)
R1361	1-216-817-11	s RESISTOR,CHIP 470 1/10W 1608
R1362	1-216-805-11	s RESISTOR,CHIP 47 1/10W 1608
R1363	1-216-829-11	s RESISTOR,CHIP 4.7K 1/10W(1608)
R1364	1-216-864-11	s CONDUCTOR, CHIP (1608)
R1365	1-216-833-11	s RESISTOR,CHIP 10K 1/10W (1608)
R1366	1-216-833-11	s RESISTOR,CHIP 10K 1/10W (1608)
R1367	1-216-833-11	s RESISTOR,CHIP 10K 1/10W (1608)
R1368	1-216-829-11	s RESISTOR,CHIP 4.7K 1/10W(1608)
R1369	1-216-833-11	s RESISTOR,CHIP 10K 1/10W (1608)
R1370	1-216-833-11	s RESISTOR,CHIP 10K 1/10W (1608)
R1371	1-216-835-11	s RESISTOR,CHIP 15K 1/10W
R1372	1-211-985-11	s RESISTOR,CHIP 47 1/10W (1608)
R1373	1-216-821-11	s RESISTOR,CHIP 1.0K 1/10W(1608)
R1374	1-216-829-11	s RESISTOR,CHIP 4.7K 1/10W(1608)
R1375	1-216-833-11	s RESISTOR,CHIP 10K 1/10W (1608)
R1376	1-216-864-11	s CONDUCTOR, CHIP (1608)
R1377	1-216-833-11	s RESISTOR,CHIP 10K 1/10W (1608)
R1378	1-216-829-11	s RESISTOR,CHIP 4.7K 1/10W(1608)
R1379	1-216-829-11	s RESISTOR,CHIP 4.7K 1/10W(1608)
R1380	1-216-821-11	s RESISTOR,CHIP 1.0K 1/10W(1608)
R1381	1-216-839-11	s RESISTOR,CHIP 33K 1/10W 1608
R1382	1-216-839-11	s RESISTOR,CHIP 33K 1/10W 1608
R1383	1-216-833-11	s RESISTOR,CHIP 10K 1/10W (1608)
R1384	1-216-864-11	s CONDUCTOR, CHIP (1608)
R1385	1-216-829-11	s RESISTOR,CHIP 4.7K 1/10W(1608)
R1386	1-218-885-11	s RESISTOR,CHIP 39K 1/10W (1608)
R1387	1-216-864-11	s CONDUCTOR, CHIP (1608)
R1389	1-216-801-11	s RESISTOR,CHIP 22 1/10W (1608)
R1390	1-216-841-11	s RESISTOR, CHIP 47K 1/10W 1608

(DPR-224 BOARD)

Ref. No. or Q ty	Part No.	SP Description
R1392	1-216-864-11	s CONDUCTOR, CHIP (1608)
R1393	1-216-809-11	s RESISTOR,CHIP 100 1/10W 1608
R1394	1-216-809-11	s RESISTOR,CHIP 100 1/10W 1608
R1395	1-216-809-11	s RESISTOR,CHIP 100 1/10W 1608
R1401	1-216-833-11	s RESISTOR,CHIP 10K 1/10W (1608)
R1402	1-216-864-11	s CONDUCTOR, CHIP (1608)
R1403	1-216-864-11	s CONDUCTOR, CHIP (1608)
R1404	1-216-833-11	s RESISTOR,CHIP 10K 1/10W (1608)
R1405	1-216-833-11	s RESISTOR,CHIP 10K 1/10W (1608)
R1406	1-216-801-11	s RESISTOR,CHIP 22 1/10W (1608)
R1407	1-216-801-11	s RESISTOR,CHIP 22 1/10W (1608)
R1408	1-216-801-11	s RESISTOR,CHIP 22 1/10W (1608)
R1409	1-216-801-11	s RESISTOR,CHIP 22 1/10W (1608)
R1410	1-216-801-11	s RESISTOR,CHIP 22 1/10W (1608)
R1411	1-216-801-11	s RESISTOR,CHIP 22 1/10W (1608)
R1412	1-216-801-11	s RESISTOR,CHIP 22 1/10W (1608)
R1413	1-216-801-11	s RESISTOR,CHIP 22 1/10W (1608)
R1414	1-216-801-11	s RESISTOR,CHIP 22 1/10W (1608)
R1415	1-216-801-11	s RESISTOR,CHIP 22 1/10W (1608)
R1416	1-216-801-11	s RESISTOR,CHIP 22 1/10W (1608)
R1417	1-216-801-11	s RESISTOR,CHIP 22 1/10W (1608)
R1418	1-216-801-11	s RESISTOR,CHIP 22 1/10W (1608)
R1419	1-216-801-11	s RESISTOR,CHIP 22 1/10W (1608)
R1420	1-216-801-11	s RESISTOR,CHIP 22 1/10W (1608)
R1421	1-216-801-11	s RESISTOR,CHIP 22 1/10W (1608)
R1422	1-216-864-11	s CONDUCTOR, CHIP (1608)
R1423	1-216-864-11	s CONDUCTOR, CHIP (1608)
R1424	1-216-864-11	s CONDUCTOR, CHIP (1608)
R1425	1-216-801-11	s RESISTOR,CHIP 22 1/10W (1608)
R1426	1-216-801-11	s RESISTOR,CHIP 22 1/10W (1608)
R1427	1-216-801-11	s RESISTOR,CHIP 22 1/10W (1608)
R1428	1-216-864-11	s CONDUCTOR, CHIP (1608)
R1429	1-216-864-11	s CONDUCTOR, CHIP (1608)
R1430	1-216-864-11	s CONDUCTOR, CHIP (1608)
R1431	1-216-801-11	s RESISTOR,CHIP 22 1/10W (1608)
R1433	1-216-801-11	s RESISTOR,CHIP 22 1/10W (1608)
R1434	1-216-801-11	s RESISTOR,CHIP 22 1/10W (1608)
R1435	1-216-801-11	s RESISTOR,CHIP 22 1/10W (1608)
R1436	1-216-801-11	s RESISTOR,CHIP 22 1/10W (1608)
R1437	1-216-801-11	s RESISTOR,CHIP 22 1/10W (1608)
R1438	1-216-801-11	s RESISTOR,CHIP 22 1/10W (1608)
R1439	1-216-801-11	s RESISTOR,CHIP 22 1/10W (1608)
R1440	1-216-801-11	s RESISTOR,CHIP 22 1/10W (1608)
R1441	1-216-864-11	s CONDUCTOR, CHIP (1608)
R1442	1-216-833-11	s RESISTOR,CHIP 10K 1/10W (1608)
R1443	1-216-833-11	s RESISTOR,CHIP 10K 1/10W (1608)
R1444	1-216-864-11	s CONDUCTOR, CHIP (1608)
R1445	1-216-864-11	s CONDUCTOR, CHIP (1608)
R1446	1-216-864-11	s CONDUCTOR, CHIP (1608)
R1447	1-216-864-11	s CONDUCTOR, CHIP (1608)
R1448	1-216-864-11	s CONDUCTOR, CHIP (1608)
R1449	1-216-801-11	s RESISTOR,CHIP 22 1/10W (1608)
R1450	1-216-801-11	s RESISTOR,CHIP 22 1/10W (1608)
R1451	1-216-801-11	s RESISTOR,CHIP 22 1/10W (1608)
R1452	1-216-801-11	s RESISTOR,CHIP 22 1/10W (1608)
R1454	1-216-864-11	s CONDUCTOR, CHIP (1608)
R1455	1-216-864-11	s CONDUCTOR, CHIP (1608)
R1456	1-216-864-11	s CONDUCTOR, CHIP (1608)
R1457	1-216-801-11	s RESISTOR,CHIP 22 1/10W (1608)

(DPR-224 BOARD)

Ref. No. or Q ty	Part No.	SP Description
R1458	1-216-801-11	s RESISTOR,CHIP 22 1/10W (1608)
R1459	1-216-864-11	s CONDUCTOR, CHIP (1608)
R1460	1-216-801-11	s RESISTOR,CHIP 22 1/10W (1608)
R1501	1-216-841-11	s RESISTOR, CHIP 47K 1/10W 1608
R1502	1-218-877-11	s RESISTOR,CHIP 18K 1/10W (1608)
R1503	1-216-839-11	s RESISTOR,CHIP 33K 1/10W 1608
R1504	1-216-841-11	s RESISTOR, CHIP 47K 1/10W 1608
R1505	1-216-829-11	s RESISTOR,CHIP 4.7K 1/10W(1608)
R1506	1-216-841-11	s RESISTOR, CHIP 47K 1/10W 1608
R1508	1-216-835-11	s RESISTOR,CHIP 15K 1/10W
R1509	1-216-841-11	s RESISTOR, CHIP 47K 1/10W 1608
R1510	1-216-864-11	s CONDUCTOR, CHIP (1608)
R1511	1-216-841-11	s RESISTOR, CHIP 47K 1/10W 1608
R1512	1-216-841-11	s RESISTOR, CHIP 47K 1/10W 1608
R1601	1-218-871-11	s RESISTOR,CHIP 10K 1/10W (1608)
R1602	1-218-841-11	s RESISTOR,CHIP 560 1/10W (1608)
R1603	1-218-871-11	s RESISTOR,CHIP 10K 1/10W (1608)
R1604	1-218-863-11	s RESISTOR,CHIP 4.7K 1/10W(1608)
R1605	1-218-823-11	s RESISTOR,CHIP 100 1/10W (1608)
R1606	1-218-871-11	s RESISTOR,CHIP 10K 1/10W (1608)
R1607	1-216-833-11	s RESISTOR,CHIP 10K 1/10W (1608)
R1608	1-216-833-11	s RESISTOR,CHIP 10K 1/10W (1608)
R1701	1-216-797-11	s RESISTOR,CHIP 10 1/10W 1608
R1702	1-216-833-11	s RESISTOR,CHIP 10K 1/10W (1608)
R1703	1-216-833-11	s RESISTOR,CHIP 10K 1/10W (1608)
R1704	1-216-825-11	s RESISTOR,CHIP 2.2K 1/10W 1608
R1705	1-216-827-11	s RESISTOR, CHIP 3.3K 1/10W 1608
R1706	1-216-864-11	s CONDUCTOR, CHIP (1608)
R1708	1-216-827-11	s RESISTOR, CHIP 3.3K 1/10W 1608
R1709	1-216-833-11	s RESISTOR,CHIP 10K 1/10W (1608)
R1710	1-216-821-11	s RESISTOR,CHIP 1.0K 1/10W(1608)
R1711	1-216-797-11	s RESISTOR,CHIP 10 1/10W 1608
R1712	1-216-797-11	s RESISTOR,CHIP 10 1/10W 1608
R1713	1-216-833-11	s RESISTOR,CHIP 10K 1/10W (1608)
R1714	1-216-833-11	s RESISTOR,CHIP 10K 1/10W (1608)
R1801	1-216-797-11	s RESISTOR,CHIP 10 1/10W 1608
R1802	1-216-833-11	s RESISTOR,CHIP 10K 1/10W (1608)
R1803	1-216-833-11	s RESISTOR,CHIP 10K 1/10W (1608)
R1804	1-216-833-11	s RESISTOR,CHIP 10K 1/10W (1608)
R1805	1-216-833-11	s RESISTOR,CHIP 10K 1/10W (1608)
R1806	1-216-833-11	s RESISTOR,CHIP 10K 1/10W (1608)
R1807	1-216-833-11	s RESISTOR,CHIP 10K 1/10W (1608)
R1808	1-216-833-11	s RESISTOR,CHIP 10K 1/10W (1608)
R1809	1-216-833-11	s RESISTOR,CHIP 10K 1/10W (1608)
R1810	1-216-829-11	s RESISTOR,CHIP 4.7K 1/10W(1608)
R1811	1-216-829-11	s RESISTOR,CHIP 4.7K 1/10W(1608)
R1812	1-216-829-11	s RESISTOR,CHIP 4.7K 1/10W(1608)
R1813	1-216-841-11	s RESISTOR, CHIP 47K 1/10W 1608
R1814	1-216-829-11	s RESISTOR,CHIP 4.7K 1/10W(1608)
R1815	1-216-829-11	s RESISTOR,CHIP 4.7K 1/10W(1608)
R1817	1-216-829-11	s RESISTOR,CHIP 4.7K 1/10W(1608)
R1818	1-216-829-11	s RESISTOR,CHIP 4.7K 1/10W(1608)
R1901	1-216-853-11	s RESISTOR,CHIP 470K 1/16W(1608)
R1902	1-218-881-11	s RESISTOR, CHIP 27K 1/10W(1608)
R1903	1-216-839-11	s RESISTOR,CHIP 33K 1/10W 1608
R1905	1-216-835-11	s RESISTOR,CHIP 15K 1/10W
R1906	1-216-841-11	s RESISTOR, CHIP 47K 1/10W 1608
R1907	1-216-841-11	s RESISTOR, CHIP 47K 1/10W 1608
R1908	1-216-841-11	s RESISTOR, CHIP 47K 1/10W 1608

(DPR-224 BOARD)

Ref. No. or Q ty	Part No.	SP Description
R1909	1-216-841-11	s RESISTOR, CHIP 47K 1/10W 1608
R1910	1-216-864-11	s CONDUCTOR, CHIP (1608)
R1911	1-216-841-11	s RESISTOR, CHIP 47K 1/10W 1608
R1912	1-216-841-11	s RESISTOR, CHIP 47K 1/10W 1608
R2001	1-216-825-11	s RESISTOR,CHIP 2.2K 1/10W 1608
R2002	1-216-801-11	s RESISTOR,CHIP 22 1/10W (1608)
R2003	1-216-801-11	s RESISTOR,CHIP 22 1/10W (1608)
R2004	1-216-857-11	s RESISTOR,CHIP 1M 1/10W(1608)
R2005	1-216-833-11	s RESISTOR,CHIP 10K 1/10W (1608)
R2006	1-216-833-11	s RESISTOR,CHIP 10K 1/10W (1608)
R2007	1-216-845-11	s RESISTOR,CHIP 100K 1/10W(1608)
R2009	1-216-833-11	s RESISTOR,CHIP 10K 1/10W (1608)
R2011	1-216-864-11	s CONDUCTOR, CHIP (1608)
R2012	1-216-864-11	s CONDUCTOR, CHIP (1608)
R2013	1-216-833-11	s RESISTOR,CHIP 10K 1/10W (1608)
R2015	1-216-833-11	s RESISTOR,CHIP 10K 1/10W (1608)
R2016	1-216-845-11	s RESISTOR,CHIP 100K 1/10W(1608)
R2017	1-216-845-11	s RESISTOR,CHIP 100K 1/10W(1608)
R2018	1-216-833-11	s RESISTOR,CHIP 10K 1/10W (1608)
R2019	1-216-845-11	s RESISTOR,CHIP 100K 1/10W(1608)
R2020	1-216-845-11	s RESISTOR,CHIP 100K 1/10W(1608)
R2021	1-216-864-11	s CONDUCTOR, CHIP (1608)
R2022	1-216-864-11	s CONDUCTOR, CHIP (1608)
R2023	1-216-864-11	s CONDUCTOR, CHIP (1608)
R2024	1-216-803-11	s RESISTOR,CHIP 33 1/16W (1608)
R2025	1-216-803-11	s RESISTOR,CHIP 33 1/16W (1608)
R2026	1-216-803-11	s RESISTOR,CHIP 33 1/16W (1608)
R2027	1-216-833-11	s RESISTOR,CHIP 10K 1/10W (1608)
R2028	1-216-833-11	s RESISTOR,CHIP 10K 1/10W (1608)
R2031	1-216-833-11	s RESISTOR,CHIP 10K 1/10W (1608)
R2032	1-216-833-11	s RESISTOR,CHIP 10K 1/10W (1608)
R2033	1-216-833-11	s RESISTOR,CHIP 10K 1/10W (1608)
R2034	1-216-833-11	s RESISTOR,CHIP 10K 1/10W (1608)
R2035	1-216-829-11	s RESISTOR,CHIP 4.7K 1/10W(1608)
R2036	1-216-833-11	s RESISTOR,CHIP 10K 1/10W (1608)
R2037	1-216-833-11	s RESISTOR,CHIP 10K 1/10W (1608)
R2038	1-216-833-11	s RESISTOR,CHIP 10K 1/10W (1608)
R2039	1-216-864-11	s CONDUCTOR, CHIP (1608)
R2040	1-216-833-11	s RESISTOR,CHIP 10K 1/10W (1608)
R2041	1-216-833-11	s RESISTOR,CHIP 10K 1/10W (1608)
R2042	1-216-803-11	s RESISTOR,CHIP 33 1/16W (1608)
R2043	1-216-833-11	s RESISTOR,CHIP 10K 1/10W (1608)
R2044	1-216-833-11	s RESISTOR,CHIP 10K 1/10W (1608)
R2045	1-216-833-11	s RESISTOR,CHIP 10K 1/10W (1608)
R2046	1-216-833-11	s RESISTOR,CHIP 10K 1/10W (1608)
R2047	1-216-864-11	s CONDUCTOR, CHIP (1608)
R2048	1-216-864-11	s CONDUCTOR, CHIP (1608)
R2049	1-216-801-11	s RESISTOR,CHIP 22 1/10W (1608)
R2050	1-216-801-11	s RESISTOR,CHIP 22 1/10W (1608)
R2051	1-216-801-11	s RESISTOR,CHIP 22 1/10W (1608)
R2052	1-216-801-11	s RESISTOR,CHIP 22 1/10W (1608)
R2053	1-216-801-11	s RESISTOR,CHIP 22 1/10W (1608)
R2054	1-216-801-11	s RESISTOR,CHIP 22 1/10W (1608)
R2055	1-216-801-11	s RESISTOR,CHIP 22 1/10W (1608)
R2056	1-216-801-11	s RESISTOR,CHIP 22 1/10W (1608)
R2057	1-216-801-11	s RESISTOR,CHIP 22 1/10W (1608)
R2058	1-216-801-11	s RESISTOR,CHIP 22 1/10W (1608)
R2059	1-216-833-11	s RESISTOR,CHIP 10K 1/10W (1608)
R2060	1-216-833-11	s RESISTOR,CHIP 10K 1/10W (1608)

(DPR-224 BOARD)

Ref. No. or Q ty	Part No.	SP	Description
R2901	1-216-801-11	s	RESISTOR,CHIP 22 1/10W (1608)
R2902	1-216-801-11	s	RESISTOR,CHIP 22 1/10W (1608)
R2903	1-216-801-11	s	RESISTOR,CHIP 22 1/10W (1608)
R2904	1-216-801-11	s	RESISTOR,CHIP 22 1/10W (1608)
R2905	1-216-801-11	s	RESISTOR,CHIP 22 1/10W (1608)
R2906	1-216-801-11	s	RESISTOR,CHIP 22 1/10W (1608)
R2907	1-216-801-11	s	RESISTOR,CHIP 22 1/10W (1608)
R2908	1-216-801-11	s	RESISTOR,CHIP 22 1/10W (1608)
R2909	1-216-801-11	s	RESISTOR,CHIP 22 1/10W (1608)
R2910	1-216-801-11	s	RESISTOR,CHIP 22 1/10W (1608)
R2911	1-216-801-11	s	RESISTOR,CHIP 22 1/10W (1608)
R2912	1-216-801-11	s	RESISTOR,CHIP 22 1/10W (1608)
R2914	1-216-801-11	s	RESISTOR,CHIP 22 1/10W (1608)
R2915	1-216-801-11	s	RESISTOR,CHIP 22 1/10W (1608)
R2916	1-216-801-11	s	RESISTOR,CHIP 22 1/10W (1608)
R2917	1-216-801-11	s	RESISTOR,CHIP 22 1/10W (1608)
R2918	1-216-801-11	s	RESISTOR,CHIP 22 1/10W (1608)
R2925	1-216-864-11	s	CONDUCTOR, CHIP (1608)
R2926	1-216-864-11	s	CONDUCTOR, CHIP (1608)
R2927	1-216-801-11	s	RESISTOR,CHIP 22 1/10W (1608)
R2928	1-216-801-11	s	RESISTOR,CHIP 22 1/10W (1608)
R2929	1-216-801-11	s	RESISTOR,CHIP 22 1/10W (1608)
R2930	1-216-801-11	s	RESISTOR,CHIP 22 1/10W (1608)
R2931	1-216-801-11	s	RESISTOR,CHIP 22 1/10W (1608)
R2932	1-216-801-11	s	RESISTOR,CHIP 22 1/10W (1608)
R2933	1-216-801-11	s	RESISTOR,CHIP 22 1/10W (1608)
R2934	1-216-801-11	s	RESISTOR,CHIP 22 1/10W (1608)
R2935	1-218-877-11	s	RESISTOR,CHIP 18K 1/10W (1608)
R2936	1-218-877-11	s	RESISTOR,CHIP 18K 1/10W (1608)
R2937	1-218-877-11	s	RESISTOR,CHIP 18K 1/10W (1608)
R2938	1-216-839-11	s	RESISTOR,CHIP 33K 1/10W 1608
R2939	1-216-839-11	s	RESISTOR,CHIP 33K 1/10W 1608
R2940	1-216-801-11	s	RESISTOR,CHIP 22 1/10W (1608)
R2941	1-216-801-11	s	RESISTOR,CHIP 22 1/10W (1608)
R2942	1-216-841-11	s	RESISTOR, CHIP 47K 1/10W 1608
R2943	1-216-841-11	s	RESISTOR, CHIP 47K 1/10W 1608
R2944	1-216-839-11	s	RESISTOR,CHIP 33K 1/10W 1608
R2945	1-216-841-11	s	RESISTOR, CHIP 47K 1/10W 1608
R2946	1-216-829-11	s	RESISTOR,CHIP 4.7K 1/10W(1608)
R2947	1-216-829-11	s	RESISTOR,CHIP 4.7K 1/10W(1608)
R2948	1-216-829-11	s	RESISTOR,CHIP 4.7K 1/10W(1608)
R2949	1-216-841-11	s	RESISTOR, CHIP 47K 1/10W 1608
R2950	1-216-841-11	s	RESISTOR, CHIP 47K 1/10W 1608
R2953	1-216-841-11	s	RESISTOR, CHIP 47K 1/10W 1608
R2954	1-216-841-11	s	RESISTOR, CHIP 47K 1/10W 1608
R2955	1-216-841-11	s	RESISTOR, CHIP 47K 1/10W 1608
R2957	1-216-841-11	s	RESISTOR, CHIP 47K 1/10W 1608
R2958	1-216-841-11	s	RESISTOR, CHIP 47K 1/10W 1608
R2959	1-216-841-11	s	RESISTOR, CHIP 47K 1/10W 1608
R2960	1-216-841-11	s	RESISTOR, CHIP 47K 1/10W 1608
R2961	1-216-841-11	s	RESISTOR, CHIP 47K 1/10W 1608
R2962	1-216-841-11	s	RESISTOR, CHIP 47K 1/10W 1608
R2963	1-216-841-11	s	RESISTOR, CHIP 47K 1/10W 1608
R2964	1-216-801-11	s	RESISTOR,CHIP 22 1/10W (1608)
R2965	1-216-833-11	s	RESISTOR,CHIP 10K 1/10W (1608)
R2966	1-216-801-11	s	RESISTOR,CHIP 22 1/10W (1608)
R2967	1-216-845-11	s	RESISTOR,CHIP 100K 1/10W(1608)
R2968	1-216-801-11	s	RESISTOR,CHIP 22 1/10W (1608)
R2969	1-216-801-11	s	RESISTOR,CHIP 22 1/10W (1608)

(DPR-224 BOARD)

Ref. No. or Q ty	Part No.	SP Description
R2970	1-216-845-11 s	RESISTOR,CHIP 100K 1/10W(1608)
R2971	1-216-845-11 s	RESISTOR,CHIP 100K 1/10W(1608)
R2972	1-216-801-11 s	RESISTOR,CHIP 22 1/10W (1608)
R2973	1-216-845-11 s	RESISTOR,CHIP 100K 1/10W(1608)
R2976	1-216-833-11 s	RESISTOR,CHIP 10K 1/10W (1608)
R2977	1-216-833-11 s	RESISTOR,CHIP 10K 1/10W (1608)
R2978	1-216-801-11 s	RESISTOR,CHIP 22 1/10W (1608)
R2979	1-216-801-11 s	RESISTOR,CHIP 22 1/10W (1608)
R2980	1-216-801-11 s	RESISTOR,CHIP 22 1/10W (1608)
R2981	1-216-801-11 s	RESISTOR,CHIP 22 1/10W (1608)
R2982	1-216-801-11 s	RESISTOR,CHIP 22 1/10W (1608)
RB101	1-233-575-11 s	RES, CHIP NETWORK 22
RB102	1-233-575-11 s	RES, CHIP NETWORK 22
RB103	1-233-575-11 s	RES, CHIP NETWORK 22
RB104	1-233-575-11 s	RES, CHIP NETWORK 22
RB105	1-233-575-11 s	RES, CHIP NETWORK 22
RB106	1-233-575-11 s	RES, CHIP NETWORK 22
RB107	1-233-575-11 s	RES, CHIP NETWORK 22
RB108	1-233-575-11 s	RES, CHIP NETWORK 22
RB109	1-233-575-11 s	RES, CHIP NETWORK 22
RB110	1-239-409-11 s	RESISTOR NETWORK 47 (1608)
RB112	1-239-409-11 s	RESISTOR NETWORK 47 (1608)
RB114	1-233-575-11 s	RES, CHIP NETWORK 22
RB115	1-233-575-11 s	RES, CHIP NETWORK 22
RB116	1-233-575-11 s	RES, CHIP NETWORK 22
RB201	1-233-575-11 s	RES, CHIP NETWORK 22
RB202	1-233-575-11 s	RES, CHIP NETWORK 22
RB203	1-233-575-11 s	RES, CHIP NETWORK 22
RB204	1-233-575-11 s	RES, CHIP NETWORK 22
RB205	1-233-575-11 s	RES, CHIP NETWORK 22
RB206	1-233-575-11 s	RES, CHIP NETWORK 22
RB207	1-233-575-11 s	RES, CHIP NETWORK 22
RB208	1-233-575-11 s	RES, CHIP NETWORK 22
RB209	1-233-575-11 s	RES, CHIP NETWORK 22
RB301	1-233-575-11 s	RES, CHIP NETWORK 22
RB302	1-233-575-11 s	RES, CHIP NETWORK 22
RB303	1-233-575-11 s	RES, CHIP NETWORK 22
RB304	1-233-575-11 s	RES, CHIP NETWORK 22
RB305	1-233-575-11 s	RES, CHIP NETWORK 22
RB401	1-233-576-11 s	RESISTOR,CHIP NETWORK 100
RB402	1-233-576-11 s	RESISTOR,CHIP NETWORK 100
RB601	1-233-575-11 s	RES, CHIP NETWORK 22
RB602	1-233-575-11 s	RES, CHIP NETWORK 22
RB701	1-233-576-11 s	RESISTOR,CHIP NETWORK 100
RB901	1-233-575-11 s	RES, CHIP NETWORK 22
RB902	1-233-575-11 s	RES, CHIP NETWORK 22
RB903	1-233-575-11 s	RES, CHIP NETWORK 22
RB904	1-233-575-11 s	RES, CHIP NETWORK 22
RB905	1-233-575-11 s	RES, CHIP NETWORK 22
RB906	1-233-575-11 s	RES, CHIP NETWORK 22
RB1001	1-239-409-11 s	RESISTOR NETWORK 47 (1608)
RB1101	1-233-578-11 s	RESISTOR,CHIP NETWORK 47K
RB1103	1-239-711-11 s	NETWORK, RESISTOR 0 (1608)
RB1104	1-239-711-11 s	NETWORK, RESISTOR 0 (1608)
RB1105	1-239-711-11 s	NETWORK, RESISTOR 0 (1608)
RB1106	1-239-711-11 s	NETWORK, RESISTOR 0 (1608)
RB1108	1-239-711-11 s	NETWORK, RESISTOR 0 (1608)
RB1109	1-239-711-11 s	NETWORK, RESISTOR 0 (1608)

(DPR-224 BOARD)

Ref. No. or Q ty	Part No.	SP Description
RB1110	1-239-711-11 s	NETWORK, RESISTOR 0 (1608)
RB1111	1-239-711-11 s	NETWORK, RESISTOR 0 (1608)
RB1601	1-236-908-11 s	RESISTOR,NETWORK 10K (3216)
RB1602	1-236-908-11 s	RESISTOR,NETWORK 10K (3216)
RB1603	1-233-577-11 s	RESISTOR, CHIP NETWORK 470
RB1604	1-233-577-11 s	RESISTOR, CHIP NETWORK 470
RB1701	1-233-575-11 s	RES, CHIP NETWORK 22
RB1702	1-233-575-11 s	RES, CHIP NETWORK 22
RB2001	1-233-574-11 s	RESISTOR,CHIP NETWORK 10
RB2002	1-233-574-11 s	RESISTOR,CHIP NETWORK 10
RB2003	1-233-574-11 s	RESISTOR,CHIP NETWORK 10
RB2201	1-233-270-11 o	RESISTOR, NETWORK (8 GANG) 10K
RB2202	1-233-270-11 o	RESISTOR, NETWORK (8 GANG) 10K
RB2203	1-233-270-11 o	RESISTOR, NETWORK (8 GANG) 10K
RB2204	1-233-270-11 o	RESISTOR, NETWORK (8 GANG) 10K
RB2205	1-233-270-11 o	RESISTOR, NETWORK (8 GANG) 10K
RB2206	1-233-270-11 o	RESISTOR, NETWORK (8 GANG) 10K
RB2207	1-233-412-11 s	RESISTOR,CHIP NETWORK 1K
RB2208	1-233-270-11 o	RESISTOR, NETWORK (8 GANG) 10K
RB2209	1-233-477-11 s	NETWORK, RES (8 GANG) 1K
RB2210	1-233-270-11 o	RESISTOR, NETWORK (8 GANG) 10K
RB2211	1-233-270-11 o	RESISTOR, NETWORK (8 GANG) 10K
RB2212	1-236-905-11 s	RESISTOR,NETWORK 6.8K (1608)
RB2213	1-236-905-11 s	RESISTOR,NETWORK 6.8K (1608)
RB2214	1-236-905-11 s	RESISTOR,NETWORK 6.8K (1608)
RB2215	1-233-270-11 o	RESISTOR, NETWORK (8 GANG) 10K
RB2216	1-236-908-11 s	RESISTOR,NETWORK 10K (3216)
RB2217	1-242-963-21 s	RES, NETWORK 33X4 (1005)
RB2218	1-242-963-21 s	RES, NETWORK 33X4 (1005)
RB2219	1-242-963-21 s	RES, NETWORK 33X4 (1005)
RB2220	1-242-963-21 s	RES, NETWORK 33X4 (1005)
RB2221	1-242-963-21 s	RES, NETWORK 33X4 (1005)
RB2222	1-242-963-21 s	RES, NETWORK 33X4 (1005)
RB2223	1-233-810-21 s	RES, NETWORK 100K (3216)
RB2224	1-236-906-11 s	RESISTOR, NETWORK 15K (1608)
RB2225	1-233-810-21 s	RES, NETWORK 100K (3216)
RB2226	1-242-963-21 s	RES, NETWORK 33X4 (1005)
RB2227	1-242-963-21 s	RES, NETWORK 33X4 (1005)
RB2228	1-242-963-21 s	RES, NETWORK 33X4 (1005)
RB2229	1-242-963-21 s	RES, NETWORK 33X4 (1005)
RB2230	1-242-963-21 s	RES, NETWORK 33X4 (1005)
RB2231	1-242-963-21 s	RES, NETWORK 33X4 (1005)
RB2302	1-236-908-11 s	RESISTOR,NETWORK 10K (3216)
RB2303	1-233-574-11 s	RESISTOR,CHIP NETWORK 10
RB2304	1-233-574-11 s	RESISTOR,CHIP NETWORK 10
RB2305	1-233-574-11 s	RESISTOR,CHIP NETWORK 10
RB2306	1-233-574-11 s	RESISTOR,CHIP NETWORK 10
RB2311	1-236-908-11 s	RESISTOR,NETWORK 10K (3216)
RB2901	1-233-575-11 s	RES, CHIP NETWORK 22
RB2902	1-233-575-11 s	RES, CHIP NETWORK 22
RB2903	1-233-575-11 s	RES, CHIP NETWORK 22
RV101	1-225-789-21 s	RES, ADJ, CERMET 2K
RV401	1-225-789-21 s	RES, ADJ, CERMET 2K
RV1302	1-225-792-21 s	RES, ADJ, CERMET 10K
S1601	1-692-271-31 s	SWITCH, SLIDE
S2001	1-572-473-11 s	SWITCH, TACTIL
S2301	1-692-271-31 s	SWITCH, SLIDE

(DPR-224 BOARD)

Ref. No. or Q'ty	Part No.	SP Description
TH101	1-804-378-11 s	THERMISTOR
TP1101	1-535-757-11 s	CHIP, CHECKER (CONNECTOR)
TP1102	1-535-757-11 s	CHIP, CHECKER (CONNECTOR)
TP1103	1-535-757-11 s	CHIP, CHECKER (CONNECTOR)
TP1105	1-535-757-11 s	CHIP, CHECKER (CONNECTOR)
TP1106	1-535-757-11 s	CHIP, CHECKER (CONNECTOR)
TP1107	1-535-757-11 s	CHIP, CHECKER (CONNECTOR)
TP1110	1-535-757-11 s	CHIP, CHECKER (CONNECTOR)
TP1111	1-535-757-11 s	CHIP, CHECKER (CONNECTOR)
TP1112	1-535-757-11 s	CHIP, CHECKER (CONNECTOR)
TP1113	1-535-757-11 s	CHIP, CHECKER (CONNECTOR)
TP1114	1-535-757-11 s	CHIP, CHECKER (CONNECTOR)
TP1218	1-535-757-11 s	CHIP, CHECKER (CONNECTOR)
TP1219	1-535-757-11 s	CHIP, CHECKER (CONNECTOR)
TP1301	1-535-757-11 s	CHIP, CHECKER (CONNECTOR)
TP2001	1-535-757-11 s	CHIP, CHECKER (CONNECTOR)
TP2201	1-535-757-11 s	CHIP, CHECKER (CONNECTOR)
TP2202	1-535-757-11 s	CHIP, CHECKER (CONNECTOR)
TP2301	1-535-757-11 s	CHIP, CHECKER (CONNECTOR)
X1101	1-760-845-11 s	OSCILLATOR, CRYSTAL
X1301	1-767-449-11 s	VIBRATOR, CRYSTAL
X1302	1-795-764-11 s	OSCILLATOR, CRYSTAL
X1303	1-795-762-11 s	OSCILLATOR, CRYSTAL
X1304	1-795-761-11 s	OSCILLATOR, CRYSTAL
X2001	1-767-449-11 s	VIBRATOR, CRYSTAL
X2002	1-760-622-21 s	VIBRATOR, CRYSTAL
X2201	1-760-622-21 s	VIBRATOR, CRYSTAL
X2202	1-781-226-21 s	OSCILLATOR, CRYSTAL
X2203	1-767-760-21 s	OSCILLATOR, CRYSTAL
X2401	1-795-415-21 s	VIBRATOR, CRYSTAL
X2601	1-795-176-21 s	OSCILLATOR, CRYSTAL
X2602	1-760-273-11 s	VIBRATOR, CRYSTAL
X2603	1-760-273-11 s	VIBRATOR, CRYSTAL
X2901	1-795-007-11 s	OSCILLATOR, CRYSTAL

HP-115 BOARD

Ref. No. or Q'ty	Part No.	SP Description
CN1	1-565-327-11 s	JACK, LARGE TYPE (6.3MM)
CN2	1-794-848-21 o	CONNECTOR, BOARD TO CABLE (4 PIN)

KY-536 BOARD

Ref. No. or Q'ty	Part No.	SP Description
1pc	A-8345-411-A s	MOUNTED CIRCUIT BOARD, KY-536
1pc	3-708-895-01 s	CAP (PC)
C1	1-119-751-11 s	CAPACITOR, TANTALUM 22MF/16V
C2	1-107-826-11 s	CAPACITOR, CHIP CERAMIC 0.1MF
C3	1-119-751-11 s	CAPACITOR, TANTALUM 22MF/16V
C4	1-107-826-11 s	CAPACITOR, CHIP CERAMIC 0.1MF
C101	1-107-826-11 s	CAPACITOR, CHIP CERAMIC 0.1MF
C201	1-107-826-11 s	CAPACITOR, CHIP CERAMIC 0.1MF
C202	1-107-826-11 s	CAPACITOR, CHIP CERAMIC 0.1MF
CN3	1-569-532-11 s	CONNECTOR 30P
D101	8-719-941-09 s	DIODE DAP202U
D102	8-719-941-09 s	DIODE DAP202U
D103	8-719-941-09 s	DIODE DAP202U
D104	8-719-941-09 s	DIODE DAP202U
D105	8-719-941-09 s	DIODE DAP202U
D106	8-719-941-09 s	DIODE DAP202U
D107	8-719-941-09 s	DIODE DAP202U
D108	8-719-941-09 s	DIODE DAP202U
D109	8-719-941-09 s	DIODE DAP202U
D110	8-719-941-09 s	DIODE DAP202U
D111	8-719-941-09 s	DIODE DAP202U
D112	8-719-941-09 s	DIODE DAP202U
D113	8-719-941-09 s	DIODE DAP202U
D114	8-719-941-09 s	DIODE DAP202U
D115	8-719-941-09 s	DIODE DAP202U
D116	8-719-158-19 s	DIODE RD6.2SB
D117	8-719-158-19 s	DIODE RD6.2SB
D118	8-719-158-19 s	DIODE RD6.2SB
D119	8-719-158-19 s	DIODE RD6.2SB
D120	8-719-158-19 s	DIODE RD6.2SB
D201	8-719-158-19 s	DIODE RD6.2SB
D202	8-719-158-19 s	DIODE RD6.2SB
D203	8-719-158-19 s	DIODE RD6.2SB
D204	8-719-158-19 s	DIODE RD6.2SB
D205	8-719-158-19 s	DIODE RD6.2SB
D206	8-719-989-53 s	LED CL-200HR-C-TSL
D207	8-719-061-59 s	LED CL-200PG-C-TU
D208	8-719-061-59 s	LED CL-200PG-C-TU
D209	8-719-061-59 s	LED CL-200PG-C-TU
D210	8-719-061-59 s	LED CL-200PG-C-TU
D211	8-719-061-59 s	LED CL-200PG-C-TU
D212	8-719-158-19 s	DIODE RD6.2SB
D213	8-719-158-19 s	DIODE RD6.2SB
D214	8-719-158-19 s	DIODE RD6.2SB
D215	8-719-158-19 s	DIODE RD6.2SB
IC101	8-759-524-07 s	IC TC74VHC138FT (EL)
IC201	8-759-524-51 s	IC TC74VHC573FT (EL)
IC202	8-759-524-51 s	IC TC74VHC573FT (EL)
Q101	8-729-928-54 s	TRANSISTOR DTA123JE
Q102	8-729-928-54 s	TRANSISTOR DTA123JE
Q103	8-729-928-54 s	TRANSISTOR DTA123JE
Q104	8-729-928-54 s	TRANSISTOR DTA123JE
Q105	8-729-928-54 s	TRANSISTOR DTA123JE
Q106	8-729-928-54 s	TRANSISTOR DTA123JE
Q107	8-729-928-54 s	TRANSISTOR DTA123JE
Q201	8-729-929-08 s	TRANSISTOR DTC123JE
Q202	8-729-929-08 s	TRANSISTOR DTC123JE

(KY-536 BOARD)

Ref. No. or Q'ty	Part No.	SP Description
Q203	8-729-929-08	s TRANSISTOR DTC123JE
Q204	8-729-929-08	s TRANSISTOR DTC123JE
Q205	8-729-929-08	s TRANSISTOR DTC123JE
Q206	8-729-929-08	s TRANSISTOR DTC123JE
Q207	8-729-929-08	s TRANSISTOR DTC123JE
Q208	8-729-929-08	s TRANSISTOR DTC123JE
Q209	8-729-929-08	s TRANSISTOR DTC123JE
Q210	8-729-929-08	s TRANSISTOR DTC123JE
Q211	8-729-929-08	s TRANSISTOR DTC123JE
Q212	8-729-929-08	s TRANSISTOR DTC123JE
Q213	8-729-929-08	s TRANSISTOR DTC123JE
Q214	8-729-929-08	s TRANSISTOR DTC123JE
Q215	8-729-929-08	s TRANSISTOR DTC123JE
Q216	8-729-929-08	s TRANSISTOR DTC123JE
Q217	8-729-929-08	s TRANSISTOR DTC123JE
R101	1-216-821-11	s RESISTOR,CHIP 1.0K 1/10W(1608)
R102	1-216-821-11	s RESISTOR,CHIP 1.0K 1/10W(1608)
R103	1-216-821-11	s RESISTOR,CHIP 1.0K 1/10W(1608)
R104	1-216-821-11	s RESISTOR,CHIP 1.0K 1/10W(1608)
R105	1-216-821-11	s RESISTOR,CHIP 1.0K 1/10W(1608)
R106	1-216-841-11	s RESISTOR, CHIP 47K 1/10W 1608
R107	1-216-841-11	s RESISTOR, CHIP 47K 1/10W 1608
R108	1-216-841-11	s RESISTOR, CHIP 47K 1/10W 1608
R109	1-216-841-11	s RESISTOR, CHIP 47K 1/10W 1608
R110	1-216-841-11	s RESISTOR, CHIP 47K 1/10W 1608
R111	1-216-841-11	s RESISTOR, CHIP 47K 1/10W 1608
R201	1-216-841-11	s RESISTOR, CHIP 47K 1/10W 1608
R202	1-216-841-11	s RESISTOR, CHIP 47K 1/10W 1608
R203	1-216-841-11	s RESISTOR, CHIP 47K 1/10W 1608
R204	1-216-841-11	s RESISTOR, CHIP 47K 1/10W 1608
R205	1-216-841-11	s RESISTOR, CHIP 47K 1/10W 1608
R206	1-216-841-11	s RESISTOR, CHIP 47K 1/10W 1608
R207	1-216-841-11	s RESISTOR, CHIP 47K 1/10W 1608
R208	1-216-841-11	s RESISTOR, CHIP 47K 1/10W 1608
R209	1-216-837-11	s RESISTOR,CHIP 22K 1/16W 1608
R210	1-216-837-11	s RESISTOR,CHIP 22K 1/16W 1608
R211	1-216-829-11	s RESISTOR,CHIP 4.7K 1/10W(1608)
R212	1-216-829-11	s RESISTOR,CHIP 4.7K 1/10W(1608)
R213	1-216-829-11	s RESISTOR,CHIP 4.7K 1/10W(1608)
R214	1-216-829-11	s RESISTOR,CHIP 4.7K 1/10W(1608)
R215	1-216-829-11	s RESISTOR,CHIP 4.7K 1/10W(1608)
R216	1-216-813-11	s RESISTOR, CHIP 220 1/10W 1608
R217	1-216-813-11	s RESISTOR, CHIP 220 1/10W 1608
R218	1-218-845-11	s RESISTOR,CHIP 820 1/10W (1608)
R219	1-216-813-11	s RESISTOR, CHIP 220 1/10W 1608
R220	1-216-813-11	s RESISTOR, CHIP 220 1/10W 1608
R221	1-216-813-11	s RESISTOR, CHIP 220 1/10W 1608
R222	1-216-813-11	s RESISTOR, CHIP 220 1/10W 1608
R223	1-216-813-11	s RESISTOR, CHIP 220 1/10W 1608
R224	1-218-827-11	s RESISTOR,CHIP 150 1/10W (1608)
R225	1-218-827-11	s RESISTOR,CHIP 150 1/10W (1608)
R226	1-218-827-11	s RESISTOR,CHIP 150 1/10W (1608)
R227	1-216-813-11	s RESISTOR, CHIP 220 1/10W 1608
R228	1-218-827-11	s RESISTOR,CHIP 150 1/10W (1608)
R229	1-216-813-11	s RESISTOR, CHIP 220 1/10W 1608
R230	1-218-827-11	s RESISTOR,CHIP 150 1/10W (1608)
R231	1-216-813-11	s RESISTOR, CHIP 220 1/10W 1608
R232	1-218-827-11	s RESISTOR,CHIP 150 1/10W (1608)
R233	1-216-821-11	s RESISTOR,CHIP 1.0K 1/10W(1608)

(KY-536 BOARD)

Ref. No. or Q'ty	Part No.	SP Description
R234	1-216-821-11	s RESISTOR,CHIP 1.0K 1/10W(1608)
RV201	1-225-442-11	s RES, VAR, CARBON 10K
RV202	1-225-442-11	s RES, VAR, CARBON 10K
RV203	1-225-442-11	s RES, VAR, CARBON 10K
RV204	1-225-442-11	s RES, VAR, CARBON 10K
RV205	1-225-442-11	s RES, VAR, CARBON 10K
S101	1-692-891-21	s SWITCH, TACTILE (WITH LIGHT)
S102	1-762-031-11	s SWITCH, TACTILE
S103	1-692-890-21	s SWITCH, TACTILE (WITH LIGHT)
S104	1-762-032-11	s SWITCH, TACTILE
S105	1-692-892-21	s SWITCH, TACTILE (WITH LIGHT)
S106	1-786-450-11	s SWITCH, TACTILE (ILLUMINATED)
S107	1-786-451-11	s SWITCH, TACTILE (ILLUMINATED)
S108	1-786-452-11	s SWITCH, TACTILE (ILLUMINATED)
S109	1-762-042-11	s SWITCH, TACTILE (ILLUMINATED)
S110	1-762-042-11	s SWITCH, TACTILE (ILLUMINATED)
S111	1-762-042-11	s SWITCH, TACTILE (ILLUMINATED)
S112	1-571-787-31	s SWITCH, TACTILE
S113	1-571-787-31	s SWITCH, TACTILE
S114	1-762-123-11	s SWITCH, TOGGLE
S115	1-571-787-31	s SWITCH, TACTILE
S116	1-571-787-31	s SWITCH, TACTILE
S117	1-762-123-11	s SWITCH, TOGGLE
S118	1-571-787-31	s SWITCH, TACTILE
S119	1-571-787-31	s SWITCH, TACTILE
S120	1-571-787-31	s SWITCH, TACTILE
S121	1-571-787-31	s SWITCH, TACTILE
S122	1-571-787-31	s SWITCH, TACTILE
S123	1-571-787-31	s SWITCH, TACTILE
S124	1-571-787-31	s SWITCH, TACTILE
S125	1-571-787-31	s SWITCH, TACTILE
S126	1-571-787-31	s SWITCH, TACTILE
S127	1-571-787-31	s SWITCH, TACTILE

PTC-100 BOARD

Ref. No. or Q'ty	Part No.	SP Description
C1	1-126-157-11 s	CAPACITOR,ELECT 10MF/16V (105)
C2	1-163-038-91 s	CAPACITOR,CHIP CERAMIC 0.1MF
C5	1-163-021-91 s	CAPACITOR, CERAMIC 0.01MF/50V
C6	1-163-021-91 s	CAPACITOR, CERAMIC 0.01MF/50V
C7	1-163-021-91 s	CAPACITOR, CERAMIC 0.01MF/50V
C8	1-163-021-91 s	CAPACITOR, CERAMIC 0.01MF/50V
C12	1-163-038-91 s	CAPACITOR,CHIP CERAMIC 0.1MF
CN1	1-564-005-11 o	PIN, CONNECTOR 6P
IC2	8-759-981-61 s	IC LM2901M
PH4	8-749-925-01 s	PHOTO INTERRUPTER SPI-235-18
R1	1-208-774-11 s	RESISTOR,CHIP 470 1/10W (2012)
R2	1-208-774-11 s	RESISTOR,CHIP 470 1/10W (2012)
R5	1-208-822-11 s	RESISTOR,CHIP 47K 1/10W (2012)
R6	1-216-675-11 s	RESISTOR,CHIP 10K 1/10W(2012)
R7	1-216-675-11 s	RESISTOR,CHIP 10K 1/10W(2012)
R8	1-208-822-11 s	RESISTOR,CHIP 47K 1/10W (2012)
R11	1-216-675-11 s	RESISTOR,CHIP 10K 1/10W(2012)
R12	1-216-675-11 s	RESISTOR,CHIP 10K 1/10W(2012)
R14	1-216-675-11 s	RESISTOR,CHIP 10K 1/10W(2012)
R15	1-208-814-11 s	RESISTOR,CHIP 22K 1/10W (2012)
R17	1-208-814-11 s	RESISTOR,CHIP 22K 1/10W (2012)
R18	1-216-675-11 s	RESISTOR,CHIP 10K 1/10W(2012)
R20	1-216-675-11 s	RESISTOR,CHIP 10K 1/10W(2012)
R22	1-216-675-11 s	RESISTOR,CHIP 10K 1/10W(2012)
R23	1-208-814-11 s	RESISTOR,CHIP 22K 1/10W (2012)
R24	1-216-675-11 s	RESISTOR,CHIP 10K 1/10W(2012)
R27	1-208-830-11 s	RESISTOR,CHIP 100K 1/10W(2012)
R28	1-208-830-11 s	RESISTOR,CHIP 100K 1/10W(2012)
R29	1-208-830-11 s	RESISTOR,CHIP 100K 1/10W(2012)
R30	1-208-830-11 s	RESISTOR,CHIP 100K 1/10W(2012)
R31	1-216-675-11 s	RESISTOR,CHIP 10K 1/10W(2012)
R32	1-216-675-11 s	RESISTOR,CHIP 10K 1/10W(2012)
R33	1-216-675-11 s	RESISTOR,CHIP 10K 1/10W(2012)
R34	1-216-675-11 s	RESISTOR,CHIP 10K 1/10W(2012)
R35	1-208-774-11 s	RESISTOR,CHIP 470 1/10W (2012)
R36	1-216-675-11 s	RESISTOR,CHIP 10K 1/10W(2012)
R37	1-216-675-11 s	RESISTOR,CHIP 10K 1/10W(2012)
R38	1-208-774-11 s	RESISTOR,CHIP 470 1/10W (2012)
R39	1-216-675-11 s	RESISTOR,CHIP 10K 1/10W(2012)
R40	1-216-675-11 s	RESISTOR,CHIP 10K 1/10W(2012)

RM-195 BOARD

Ref. No. or Q'ty	Part No.	SP Description
4pcs	7-682-547-04 s	SCREW +B3X6
CN1	1-766-174-11 o	CONNECTOR, SQUARE TYPE (D-SUB)
CN2	1-766-174-11 o	CONNECTOR, SQUARE TYPE (D-SUB)
CN2203	1-750-249-21 o	CONNECTOR, FPC 16P

VFD ASSEMBLY (DY-19 BOARD)

Ref. No. or Q'ty	Part No.	SP Description
2pcs	3-742-613-01 s	CUSHION,DY
C1	1-165-585-21 s	CAPACITOR, CHIP ELECT 47MF
C2	1-165-585-21 s	CAPACITOR, CHIP ELECT 47MF
C3	1-165-585-21 s	CAPACITOR, CHIP ELECT 47MF
C4	1-165-585-21 s	CAPACITOR, CHIP ELECT 47MF
C5	1-107-826-11 s	CAPACITOR,CHIP CERAMIC 0.1MF
C6	1-107-826-11 s	CAPACITOR,CHIP CERAMIC 0.1MF
C7	1-107-826-11 s	CAPACITOR,CHIP CERAMIC 0.1MF
C8	1-107-826-11 s	CAPACITOR,CHIP CERAMIC 0.1MF
C9	1-107-826-11 s	CAPACITOR,CHIP CERAMIC 0.1MF
C10	1-107-826-11 s	CAPACITOR,CHIP CERAMIC 0.1MF
C12	1-165-585-21 s	CAPACITOR, CHIP ELECT 47MF
C13	1-107-826-11 s	CAPACITOR,CHIP CERAMIC 0.1MF
C14	1-164-315-11 s	CAPACITOR,CERAMIC 470PF/50V CH
C15	1-107-826-11 s	CAPACITOR,CHIP CERAMIC 0.1MF
C101	1-107-826-11 s	CAPACITOR,CHIP CERAMIC 0.1MF
C102	1-107-826-11 s	CAPACITOR,CHIP CERAMIC 0.1MF
C103	1-107-826-11 s	CAPACITOR,CHIP CERAMIC 0.1MF
C104	1-107-826-11 s	CAPACITOR,CHIP CERAMIC 0.1MF
C105	1-165-585-21 s	CAPACITOR, CHIP ELECT 47MF
C106	1-107-826-11 s	CAPACITOR,CHIP CERAMIC 0.1MF
C107	1-107-826-11 s	CAPACITOR,CHIP CERAMIC 0.1MF
C108	1-107-826-11 s	CAPACITOR,CHIP CERAMIC 0.1MF
C109	1-107-826-11 s	CAPACITOR,CHIP CERAMIC 0.1MF
C110	1-107-826-11 s	CAPACITOR,CHIP CERAMIC 0.1MF
C111	1-107-826-11 s	CAPACITOR,CHIP CERAMIC 0.1MF
C112	1-107-826-11 s	CAPACITOR,CHIP CERAMIC 0.1MF
C113	1-107-826-11 s	CAPACITOR,CHIP CERAMIC 0.1MF
C114	1-107-826-11 s	CAPACITOR,CHIP CERAMIC 0.1MF
C115	1-107-826-11 s	CAPACITOR,CHIP CERAMIC 0.1MF
C116	1-107-826-11 s	CAPACITOR,CHIP CERAMIC 0.1MF
C117	1-107-826-11 s	CAPACITOR,CHIP CERAMIC 0.1MF
C118	1-107-826-11 s	CAPACITOR,CHIP CERAMIC 0.1MF
C119	1-107-826-11 s	CAPACITOR,CHIP CERAMIC 0.1MF
C120	1-107-826-11 s	CAPACITOR,CHIP CERAMIC 0.1MF
C121	1-162-919-11 s	CAPACITOR,CERAMIC 22PF/50V CH
C122	1-162-919-11 s	CAPACITOR,CERAMIC 22PF/50V CH
C123	1-164-315-11 s	CAPACITOR,CERAMIC 470PF/50V CH
C124	1-107-826-11 s	CAPACITOR,CHIP CERAMIC 0.1MF
C125	1-107-826-11 s	CAPACITOR,CHIP CERAMIC 0.1MF
C126	1-107-826-11 s	CAPACITOR,CHIP CERAMIC 0.1MF
C127	1-107-826-11 s	CAPACITOR,CHIP CERAMIC 0.1MF
C128	1-107-826-11 s	CAPACITOR,CHIP CERAMIC 0.1MF
C129	1-107-826-11 s	CAPACITOR,CHIP CERAMIC 0.1MF
C130	1-162-969-11 s	CAPACITOR,CERAMIC 6800PF/25V B
C131	1-107-826-11 s	CAPACITOR,CHIP CERAMIC 0.1MF
C132	1-164-230-11 s	CAPACITOR,CERAMIC 220PF/50V
C200	1-164-315-11 s	CAPACITOR,CERAMIC 470PF/50V CH
C201	1-165-585-21 s	CAPACITOR, CHIP ELECT 47MF
C202	1-107-826-11 s	CAPACITOR,CHIP CERAMIC 0.1MF
C203	1-162-968-11 s	CAPACITOR,CERAMIC 4700PF/50V B
C204	1-137-894-11 s	CAP,ELECT (CHIP TYPE) 470MF
C205	1-162-968-11 s	CAPACITOR,CERAMIC 4700PF/50V B
C206	1-117-713-21 s	CAP, CHIP TYPE ELECT 100MF
C208	1-162-923-11 s	CAPACITOR,CERAMIC 47PF/50V CH
C209	1-162-967-11 s	CAPACITOR,CERAMIC 3300PF/50V B
C300	1-162-927-11 s	CAPACITOR,CERAMIC 100PF/50V CH
C301	1-162-927-11 s	CAPACITOR,CERAMIC 100PF/50V CH

(VFD ASSEMBLY (DY-19 BOARD))

Ref. No. or Q'ty	Part No.	SP Description
C302	1-162-927-11	s CAPACITOR,CERAMIC 100PF/50V CH
C303	1-162-927-11	s CAPACITOR,CERAMIC 100PF/50V CH
C304	1-162-927-11	s CAPACITOR,CERAMIC 100PF/50V CH
C305	1-162-927-11	s CAPACITOR,CERAMIC 100PF/50V CH
C306	1-162-927-11	s CAPACITOR,CERAMIC 100PF/50V CH
C307	1-162-927-11	s CAPACITOR,CERAMIC 100PF/50V CH
C308	1-162-927-11	s CAPACITOR,CERAMIC 100PF/50V CH
C309	1-162-927-11	s CAPACITOR,CERAMIC 100PF/50V CH
C401	1-164-218-11	s CAPACITOR,CERAMIC 180PF/50V CH
C402	1-164-218-11	s CAPACITOR,CERAMIC 180PF/50V CH
C403	1-164-218-11	s CAPACITOR,CERAMIC 180PF/50V CH
C404	1-164-218-11	s CAPACITOR,CERAMIC 180PF/50V CH
C405	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C406	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C407	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C408	1-164-315-11	s CAPACITOR,CERAMIC 470PF/50V CH
C409	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
C410	1-107-826-11	s CAPACITOR,CHIP CERAMIC 0.1MF
CN1	1-766-431-21	o HOUSING, CONNECTOR 30P
CN2	1-506-485-11	s PIN,CONNECTOR 6P
CN3	1-569-532-11	s CONNECTOR 30P
CN4	1-695-889-21	s PIN, CONNECTOR (PC BOARD) 10P
D1	8-719-028-74	s DIODE NSQ03A04
D2	8-719-158-19	s DIODE RD6.2SB
D3	8-719-158-19	s DIODE RD6.2SB
D4	8-719-158-19	s DIODE RD6.2SB
D5	8-719-158-19	s DIODE RD6.2SB
D104	8-719-938-75	s DIODE SB05-05CP (RECTI)
D105	8-719-158-19	s DIODE RD6.2SB
D106	8-719-024-81	s DIODE 1SS300-TE85L
D107	8-719-158-19	s DIODE RD6.2SB
D108	8-719-158-19	s DIODE RD6.2SB
D109	8-719-158-19	s DIODE RD6.2SB
D110	8-719-989-53	s LED CL-200HR-C-TSL
D112	8-719-989-53	s LED CL-200HR-C-TSL
D113	8-719-989-53	s LED CL-200HR-C-TSL
D114	8-719-061-59	s LED CL-200PG-C-TU
D115	8-719-061-59	s LED CL-200PG-C-TU
D116	8-719-989-53	s LED CL-200HR-C-TSL
D117	8-719-061-59	s LED CL-200PG-C-TU
D118	8-719-061-59	s LED CL-200PG-C-TU
D119	8-719-061-59	s LED CL-200PG-C-TU
D200	8-719-110-03	s DIODE RD7.5ES-B2
D201	8-719-110-39	s DIODE RD15ES-B1
D202	8-719-108-24	s DIODE 1SS223
D203	8-719-110-39	s DIODE RD15ES-B1
D205	8-719-051-03	s DIODE EC11FS4-TE12L5
D206	8-719-108-24	s DIODE 1SS223
D207	8-719-110-03	s DIODE RD7.5ES-B2
F1	Δ 1-576-327-21	s FUSE (SMD)
IC1	8-759-594-71	s IC TC7SH14FU-TE85R
IC101	8-759-593-47	s IC AK6417AM-E2
IC102	8-759-586-82	s IC HD64F3048VTF8-DSBK140-V104
IC103	8-759-488-29	s IC TC7W66FU (TE12R)
IC104	8-759-524-04	s IC TC74VHC125FT (EL)
IC105	8-759-196-97	s IC TC7SH32FU (TE85R)
IC106	8-759-490-41	s IC TC74VHCT541AFT (EL)

(VFD ASSEMBLY (DY-19 BOARD))

Ref. No. or Q'ty	Part No.	SP Description
IC107	8-759-196-96	s IC TC7SH08FU (TE85R)
IC108	8-759-271-86	s IC TC7SH04FU
IC109	8-759-524-50	s IC TC74VHC541FT (EL)
IC110	8-759-524-50	s IC TC74VHC541FT (EL)
IC111	8-759-196-96	s IC TC7SH08FU (TE85R)
IC112	6-702-749-01	s IC S-80928CNNB-G8Y-T2
IC200	8-759-498-92	s IC MSM9202-03GS-K
IC401	8-759-664-61	o IC XC9536VQ44-DSR2000-JOG-V101
IC402	8-759-394-05	s IC TC7SH08F-TE85R
IC403	8-759-524-50	s IC TC74VHC541FT (EL)
L1	1-416-345-11	s COIL, CHOKE 22UH
L2	1-416-345-11	s COIL, CHOKE 22UH
L3	1-412-955-11	s INDUCTOR 22UH (2520)
L101	1-412-955-11	s INDUCTOR 22UH (2520)
L200	1-412-963-11	s INDUCTOR 100UH (2520)
L201	1-416-344-11	s COIL, CHOKE 10UH
ND201	1-518-868-11	s INDICATOR TUBE, FLUORESCENT
PS1	Δ 1-576-123-21	s CIRCUIT PROTECTOR 0.8A(IC LINK
PS2	Δ 1-576-123-21	s CIRCUIT PROTECTOR 0.8A(IC LINK
PS3	Δ 1-576-123-21	s CIRCUIT PROTECTOR 0.8A(IC LINK
Q101	8-729-928-54	s TRANSISTOR DTA123JE
Q102	8-729-929-08	s TRANSISTOR DTC123JE
Q104	8-729-929-08	s TRANSISTOR DTC123JE
Q105	8-729-929-08	s TRANSISTOR DTC123JE
Q106	8-729-929-08	s TRANSISTOR DTC123JE
Q107	8-729-929-08	s TRANSISTOR DTC123JE
Q108	8-729-929-08	s TRANSISTOR DTC123JE
Q109	8-729-929-08	s TRANSISTOR DTC123JE
Q110	8-729-929-08	s TRANSISTOR DTC123JE
Q111	8-729-929-08	s TRANSISTOR DTC123JE
Q200	8-729-230-49	s TRANSISTOR 2SC2712-YG
Q201	8-729-202-37	s TRANSISTOR 2SC3303-Y
Q300	8-729-230-49	s TRANSISTOR 2SC2712-YG
Q301	8-729-230-49	s TRANSISTOR 2SC2712-YG
Q302	8-729-230-49	s TRANSISTOR 2SC2712-YG
Q303	8-729-230-49	s TRANSISTOR 2SC2712-YG
Q304	8-729-230-49	s TRANSISTOR 2SC2712-YG
Q305	8-729-230-49	s TRANSISTOR 2SC2712-YG
Q306	8-729-230-49	s TRANSISTOR 2SC2712-YG
Q307	8-729-216-22	s TRANSISTOR 2SA1162-G
Q308	8-729-230-49	s TRANSISTOR 2SC2712-YG
Q309	8-729-216-22	s TRANSISTOR 2SA1162-G
Q310	8-729-230-49	s TRANSISTOR 2SC2712-YG
Q311	8-729-216-22	s TRANSISTOR 2SA1162-G
Q312	8-729-230-49	s TRANSISTOR 2SC2712-YG
Q313	8-729-216-22	s TRANSISTOR 2SA1162-G
R3	1-216-864-11	s CONDUCTOR, CHIP (1608)
R4	1-216-864-11	s CONDUCTOR, CHIP (1608)
R5	1-216-845-11	s RESISTOR,CHIP 100K 1/10W(1608)
R6	1-216-821-11	s RESISTOR,CHIP 1.0K 1/10W(1608)
R7	1-216-845-11	s RESISTOR,CHIP 100K 1/10W(1608)
R8	1-216-841-11	s RESISTOR, CHIP 47K 1/10W 1608
R9	1-216-821-11	s RESISTOR,CHIP 1.0K 1/10W(1608)
R10	1-216-864-11	s CONDUCTOR, CHIP (1608)
R11	1-216-864-11	s CONDUCTOR, CHIP (1608)
R15	1-216-864-11	s CONDUCTOR, CHIP (1608)

(VFD ASSEMBLY (DY-19 BOARD))

Ref. No. or Q'ty	Part No.	SP Description
R17	1-216-864-11	s CONDUCTOR, CHIP (1608)
R101	1-216-841-11	s RESISTOR, CHIP 47K 1/10W 1608
R102	1-216-841-11	s RESISTOR, CHIP 47K 1/10W 1608
R103	1-216-841-11	s RESISTOR, CHIP 47K 1/10W 1608
R104	1-216-809-11	s RESISTOR,CHIP 100 1/10W 1608
R105	1-216-809-11	s RESISTOR,CHIP 100 1/10W 1608
R106	1-216-809-11	s RESISTOR,CHIP 100 1/10W 1608
R107	1-216-833-11	s RESISTOR,CHIP 10K 1/10W (1608)
R108	1-216-841-11	s RESISTOR, CHIP 47K 1/10W 1608
R109	1-216-809-11	s RESISTOR,CHIP 100 1/10W 1608
R110	1-216-809-11	s RESISTOR,CHIP 100 1/10W 1608
R111	1-216-841-11	s RESISTOR, CHIP 47K 1/10W 1608
R112	1-216-841-11	s RESISTOR, CHIP 47K 1/10W 1608
R113	1-216-841-11	s RESISTOR, CHIP 47K 1/10W 1608
R114	1-216-841-11	s RESISTOR, CHIP 47K 1/10W 1608
R115	1-216-841-11	s RESISTOR, CHIP 47K 1/10W 1608
R116	1-216-841-11	s RESISTOR, CHIP 47K 1/10W 1608
R117	1-216-833-11	s RESISTOR,CHIP 10K 1/10W (1608)
R118	1-216-841-11	s RESISTOR, CHIP 47K 1/10W 1608
R119	1-216-841-11	s RESISTOR, CHIP 47K 1/10W 1608
R120	1-216-809-11	s RESISTOR,CHIP 100 1/10W 1608
R121	1-216-809-11	s RESISTOR,CHIP 100 1/10W 1608
R122	1-216-809-11	s RESISTOR,CHIP 100 1/10W 1608
R123	1-216-809-11	s RESISTOR,CHIP 100 1/10W 1608
R124	1-216-809-11	s RESISTOR,CHIP 100 1/10W 1608
R125	1-216-809-11	s RESISTOR,CHIP 100 1/10W 1608
R126	1-216-809-11	s RESISTOR,CHIP 100 1/10W 1608
R127	1-216-809-11	s RESISTOR,CHIP 100 1/10W 1608
R128	1-216-809-11	s RESISTOR,CHIP 100 1/10W 1608
R129	1-216-809-11	s RESISTOR,CHIP 100 1/10W 1608
R130	1-216-809-11	s RESISTOR,CHIP 100 1/10W 1608
R131	1-216-809-11	s RESISTOR,CHIP 100 1/10W 1608
R132	1-216-809-11	s RESISTOR,CHIP 100 1/10W 1608
R133	1-216-809-11	s RESISTOR,CHIP 100 1/10W 1608
R134	1-216-809-11	s RESISTOR,CHIP 100 1/10W 1608
R135	1-216-809-11	s RESISTOR,CHIP 100 1/10W 1608
R136	1-216-809-11	s RESISTOR,CHIP 100 1/10W 1608
R137	1-216-809-11	s RESISTOR,CHIP 100 1/10W 1608
R138	1-216-809-11	s RESISTOR,CHIP 100 1/10W 1608
R139	1-216-809-11	s RESISTOR,CHIP 100 1/10W 1608
R140	1-216-809-11	s RESISTOR,CHIP 100 1/10W 1608
R141	1-216-809-11	s RESISTOR,CHIP 100 1/10W 1608
R142	1-216-809-11	s RESISTOR,CHIP 100 1/10W 1608
R143	1-216-829-11	s RESISTOR,CHIP 4.7K 1/10W(1608)
R144	1-216-833-11	s RESISTOR,CHIP 10K 1/10W (1608)
R145	1-218-830-11	s RESISTOR,CHIP 200 1/10W (1608)
R146	1-216-841-11	s RESISTOR, CHIP 47K 1/10W 1608
R147	1-216-841-11	s RESISTOR, CHIP 47K 1/10W 1608
R148	1-216-841-11	s RESISTOR, CHIP 47K 1/10W 1608
R149	1-216-841-11	s RESISTOR, CHIP 47K 1/10W 1608
R150	1-216-809-11	s RESISTOR,CHIP 100 1/10W 1608
R151	1-216-841-11	s RESISTOR, CHIP 47K 1/10W 1608
R152	1-216-821-11	s RESISTOR,CHIP 1.0K 1/10W(1608)
R153	1-216-821-11	s RESISTOR,CHIP 1.0K 1/10W(1608)
R154	1-216-821-11	s RESISTOR,CHIP 1.0K 1/10W(1608)
R155	1-216-817-11	s RESISTOR,CHIP 470 1/10W 1608
R156	1-216-841-11	s RESISTOR, CHIP 47K 1/10W 1608
R157	1-216-853-11	s RESISTOR,CHIP 470K 1/16W(1608)
R158	1-216-841-11	s RESISTOR, CHIP 47K 1/10W 1608

(VFD ASSEMBLY (DY-19 BOARD))

Ref. No. or Q'ty	Part No.	SP Description
R159	1-216-833-11	s RESISTOR,CHIP 10K 1/10W (1608)
R160	1-218-882-11	s RESISTOR, CHIP 30K 1/10W(1608)
R161	1-218-859-11	s RESISTOR,CHIP 3.3K 1/10W(1608)
R162	1-218-847-11	s RESISTOR, CHIP 1K 1/10W (1608)
R163	1-216-841-11	s RESISTOR, CHIP 47K 1/10W 1608
R164	1-216-841-11	s RESISTOR, CHIP 47K 1/10W 1608
R165	1-216-841-11	s RESISTOR, CHIP 47K 1/10W 1608
R166	1-216-841-11	s RESISTOR, CHIP 47K 1/10W 1608
R167	1-216-841-11	s RESISTOR, CHIP 47K 1/10W 1608
R168	1-216-841-11	s RESISTOR, CHIP 47K 1/10W 1608
R169	1-216-841-11	s RESISTOR, CHIP 47K 1/10W 1608
R170	1-216-841-11	s RESISTOR, CHIP 47K 1/10W 1608
R171	1-216-841-11	s RESISTOR, CHIP 47K 1/10W 1608
R174	1-216-841-11	s RESISTOR, CHIP 47K 1/10W 1608
R175	1-216-841-11	s RESISTOR, CHIP 47K 1/10W 1608
R176	1-216-841-11	s RESISTOR, CHIP 47K 1/10W 1608
R177	1-216-841-11	s RESISTOR, CHIP 47K 1/10W 1608
R178	1-216-841-11	s RESISTOR, CHIP 47K 1/10W 1608
R179	1-216-841-11	s RESISTOR, CHIP 47K 1/10W 1608
R180	1-218-845-11	s RESISTOR,CHIP 820 1/10W (1608)
R181	1-216-841-11	s RESISTOR, CHIP 47K 1/10W 1608
R182	1-218-845-11	s RESISTOR,CHIP 820 1/10W (1608)
R183	1-216-813-11	s RESISTOR, CHIP 220 1/10W 1608
R184	1-218-827-11	s RESISTOR,CHIP 150 1/10W (1608)
R185	1-218-827-11	s RESISTOR,CHIP 150 1/10W (1608)
R186	1-218-845-11	s RESISTOR,CHIP 820 1/10W (1608)
R187	1-218-827-11	s RESISTOR,CHIP 150 1/10W (1608)
R188	1-218-827-11	s RESISTOR,CHIP 150 1/10W (1608)
R189	1-218-827-11	s RESISTOR,CHIP 150 1/10W (1608)
R190	1-216-841-11	s RESISTOR, CHIP 47K 1/10W 1608
R191	1-216-841-11	s RESISTOR, CHIP 47K 1/10W 1608
R192	1-216-841-11	s RESISTOR, CHIP 47K 1/10W 1608
R193	1-216-841-11	s RESISTOR, CHIP 47K 1/10W 1608
R194	1-216-841-11	s RESISTOR, CHIP 47K 1/10W 1608
R195	1-216-809-11	s RESISTOR,CHIP 100 1/10W 1608
R196	1-216-841-11	s RESISTOR, CHIP 47K 1/10W 1608
R197	1-216-841-11	s RESISTOR, CHIP 47K 1/10W 1608
R198	1-216-825-11	s RESISTOR,CHIP 2.2K 1/10W 1608
R199	1-216-841-11	s RESISTOR, CHIP 47K 1/10W 1608
R201	1-216-821-11	s RESISTOR,CHIP 1.0K 1/10W(1608)
R202	1-216-829-11	s RESISTOR,CHIP 4.7K 1/10W(1608)
R203	1-216-823-11	s RESISTOR, CHIP 1.5K 1/10W
R204	1-216-813-11	s RESISTOR, CHIP 220 1/10W 1608
R205	1-216-815-11	s RESISTOR,CHIP 330 1/10W 1608
R207	1-218-865-11	s RESISTOR,CHIP 5.6K 1/10W(1608)
R208	1-216-809-11	s RESISTOR,CHIP 100 1/10W 1608
R209	1-216-809-11	s RESISTOR,CHIP 100 1/10W 1608
R211	1-218-865-11	s RESISTOR,CHIP 5.6K 1/10W(1608)
R212	1-216-827-11	s RESISTOR, CHIP 3.3K 1/10W 1608
R300	1-216-809-11	s RESISTOR,CHIP 100 1/10W 1608
R301	1-216-809-11	s RESISTOR,CHIP 100 1/10W 1608
R302	1-216-809-11	s RESISTOR,CHIP 100 1/10W 1608
R303	1-216-809-11	s RESISTOR,CHIP 100 1/10W 1608
R304	1-216-809-11	s RESISTOR,CHIP 100 1/10W 1608
R305	1-216-809-11	s RESISTOR,CHIP 100 1/10W 1608
R306	1-216-809-11	s RESISTOR,CHIP 100 1/10W 1608
R307	1-216-809-11	s RESISTOR,CHIP 100 1/10W 1608
R308	1-216-809-11	s RESISTOR,CHIP 100 1/10W 1608
R309	1-216-809-11	s RESISTOR,CHIP 100 1/10W 1608

(VFD ASSEMBLY (DY-19 BOARD))

Ref. No. or Q'ty	Part No.	SP Description
R310	1-216-833-11 s	RESISTOR,CHIP 10K 1/10W (1608)
R311	1-216-833-11 s	RESISTOR,CHIP 10K 1/10W (1608)
R312	1-216-833-11 s	RESISTOR,CHIP 10K 1/10W (1608)
R313	1-216-833-11 s	RESISTOR,CHIP 10K 1/10W (1608)
R314	1-216-833-11 s	RESISTOR,CHIP 10K 1/10W (1608)
R315	1-216-833-11 s	RESISTOR,CHIP 10K 1/10W (1608)
R316	1-216-833-11 s	RESISTOR,CHIP 10K 1/10W (1608)
R317	1-216-833-11 s	RESISTOR,CHIP 10K 1/10W (1608)
R318	1-216-833-11 s	RESISTOR,CHIP 10K 1/10W (1608)
R319	1-216-833-11 s	RESISTOR,CHIP 10K 1/10W (1608)
R401	1-216-821-11 s	RESISTOR,CHIP 1.0K 1/10W(1608)
R402	1-216-841-11 s	RESISTOR, CHIP 47K 1/10W 1608
R1101	1-216-841-11 s	RESISTOR, CHIP 47K 1/10W 1608
R1102	1-216-841-11 s	RESISTOR, CHIP 47K 1/10W 1608
R1103	1-216-841-11 s	RESISTOR, CHIP 47K 1/10W 1608
R1104	1-216-841-11 s	RESISTOR, CHIP 47K 1/10W 1608
R1105	1-216-841-11 s	RESISTOR, CHIP 47K 1/10W 1608
R1106	1-216-841-11 s	RESISTOR, CHIP 47K 1/10W 1608
R1107	1-216-841-11 s	RESISTOR, CHIP 47K 1/10W 1608
R1108	1-216-841-11 s	RESISTOR, CHIP 47K 1/10W 1608
R1109	1-216-841-11 s	RESISTOR, CHIP 47K 1/10W 1608
R1110	1-216-864-11 s	CONDUCTOR, CHIP (1608)
R1112	1-216-841-11 s	RESISTOR, CHIP 47K 1/10W 1608
R1114	1-216-864-11 s	CONDUCTOR, CHIP (1608)
R1116	1-216-864-11 s	CONDUCTOR, CHIP (1608)
R1117	1-216-841-11 s	RESISTOR, CHIP 47K 1/10W 1608
RB401	1-233-412-11 s	RESISTOR,CHIP NETWORK 1K
RB402	1-236-908-11 s	RESISTOR,NETWORK 10K (3216)
RV101	1-241-856-11 s	RESISTOR, VAR, CARBON 5K
RV102	1-241-856-11 s	RESISTOR, VAR, CARBON 5K
S1	1-554-118-00 s	SWITCH,PUSH
T2	1-439-573-11 s	TRANSFORMER, CONVERTER
X101	1-767-636-11 s	VIBRATOR, CRYSTAL

8-4. Frame List

部品番号が記載されていないハーネスは、サービス部品として登録されていません。
これらは、リストに展開されているコンポーネント部品で補修してください。

Harnesses with no part number are not registered as spare parts.
In need of repair, get components shown in the list and repair using them.

Ref. No.
or Q'ty Part No. SP Description

HN001 1-824-899-11 s CABLE, IDE
(TO CN2201/DPR-224 BOARD)
(TO HDD (1))

HN002 1-824-899-11 s CABLE, IDE
(TO CN2202/DPR-224 BOARD)
(TO HDD (2))

HN003 - - - HARNESS, SUB (DPR-HDD1)
(TO CN103/DPR-224 BOARD)
1pc 1-562-285-11 s HOUSING, CONNECTOR 4P
4pcs 1-562-210-11 s CONTACT, CONNECTOR
(TO HDD (1))
1pc 1-508-424-11 o CONNECTOR, AC
4pcs 1-535-714-11 o CONNECTOR, AC
(TO HDD (2))
1pc 1-508-424-11 o CONNECTOR, AC
4pcs 1-535-714-11 o CONNECTOR, AC

HN004 - - - HARNESS, SUB (DPR-HP)
(TO CN1003/DPR-224 BOARD)
1pc 1-764-194-11 o HOUSING, CONNECTOR 4P
4pcs 1-695-215-11 o TERMINAL, SOLDERLESS
(TO CN2/HP-115 BOARD)
1pc 1-764-194-11 o HOUSING, CONNECTOR 4P
4pcs 1-695-215-11 o TERMINAL, SOLDERLESS

8-5. Packing Materials & Supplied Accessories

----- DSR-DR1000 (for J) -----

Ref. No. or Q'ty	Part No.	SP Description
1pc	1-477-401-11	s REMOTE COMMANDER (RM-LG2)
1pc	Δ 1-791-041-31	s CORD SET, POWER
1pc	Δ 1-793-461-11	o PLUG, CONVERSION (3P-2P)
1pc	3-704-782-01	s OPERATING INSTRUCTIONS

----- DSR-DR1000 (for UC) -----

Ref. No. or Q'ty	Part No.	SP Description
1pc	1-477-401-11	s REMOTE COMMANDER (RM-LG2)
1pc	Δ 1-551-812-11	s CORD, POWER
1pc	3-704-782-11	s OPERATING INSTRUCTIONS
1pc	3-742-675-01	s CD-ROM(DSR-DR1000)

----- DSR-DR1000P (for CE) -----

Ref. No. or Q'ty	Part No.	SP Description
1pc	1-469-969-11	s CLAMP, FERRITE
1pc	1-477-401-11	s REMOTE COMMANDER (RM-LG2)
1pc	Δ 1-782-929-11	s CORD, POWER (BS 3P)
1pc	3-704-782-11	s OPERATING INSTRUCTIONS
1pc	3-742-675-01	s CD-ROM(DSR-DR1000)

----- DSR-DR1000P (for CN) -----

Ref. No. or Q'ty	Part No.	SP Description
1pc	1-469-969-11	s CLAMP, FERRITE
1pc	1-477-401-11	s REMOTE COMMANDER (RM-LG2)
1pc	Δ 1-783-481-41	s CORD, POWER
1pc	3-704-782-51	s OPERATING INSTRUCTIONS

Section 9
Circuit Description and Block Diagram

Circuit Description

1. Video Signal Processing System

Recording System

For DSR-DR1000/DR1000P, the input analog video signal is converted into the component parallel digital signal at IC100 on the DDE-18 board, and is then sent to the DPR-224 board. The SDI signal is sent to IC801 on the DPR-224 board to decode into the component parallel digital signal. After an appropriate video signal is selected from above digital video signals at IC2901 (FPGA) using video input selector, it is sent to IC1402 (Recording System DV_CODEC). Signal processing for the DV-compressed signal is carried out in IC2601/2701/2801 (FPGA) so that the signal is recorded on the hard disk. Then the resultant signal is converted into the ATA interface at IC2201 and recorded on the hard disk.

For i.LINK Input

The serial digital signal input from the i.LINK connector is converted into the parallel bus signal at IC2401 (PHY/LINK) on the DPR-224 board. Signal processing for this signal is carried out in IC2601/2701/2801 (FPGA) so that the signal is recorded on the hard disk. Then it is converted into the ATA interface at IC2201 and recorded on the hard disk.

Playback System

The signal recorded on the hard disk is converted from the ATA interface into the parallel bus at IC2201 on the DPR-224 board, and is converted into the DV-compressed form at IC2601/2701/2801 (FPGA). Then the resultant signal is decoded into the video signal of the baseband at IC1413 (DV_CODEC). The decoded video signal is input in IC2901, and the two signals, the main line system and the super-imposed character signals, are output. The signal of main line system is input in IC100 on the DEN-20 board, and is encoded into the composite signal, S-VIDEO signal, or YRB component signal. The signal of super-imposed character is input in IC101 on the DEN-20 board, and is encoded into the composite signal. For the SDI output, the 10-bit parallel signal of the main line system is input in IC801 from IC2901 on the DPR-224 board. The parallel signal received the signal processing is supplied to IC401 (parallel/serial conversion IC), and is output through SDI OUT1 and SDI OUT2 connectors as the 270 MHz of SDI signal.

For i.LINK Output

The signal recorded on the hard disk is converted from the ATA interface into the parallel bus at IC2201 on the DPR-224 board, and is then converted into the DV-compressed form at IC2601/2701/2801 (FPGA). This signal is converted into the parallel bus signal again, and is then supplied to IC2401 (LINK/PHY) and output through the i.LINK connector.

2. Audio Signal Processing System

Recording System

For DSR-DR1000/DR1000P, the input analog audio signal is converted into the serial digital signal at IC308 on the DDE-18 board, and is then sent to the DPR-224 board.

The SDI and AES/EBU signals are sent to IC801 on the DPR-224 board to decode into the serial digital signals. After an appropriate audio signal is selected from above digital audio signals at IC2901 (FPGA) using audio input selector, the selected signal is applied the signal processing such as MIX/SWAP at IC1101 (DSP). Signal processing for this audio signal is carried out in IC2601/2701/2801 (FPGA) so that the signal is recorded on the hard disk. Then the resultant signal is converted into the ATA interface at IC2201 and recorded on the hard disk.

For i.LINK Input

The serial digital signal input from the i.LINK connector is converted into the parallel bus signal at IC2401 (PHY/LINK) on the DPR-224 board and bus-converted at IC2601/2701/2801 (FPGA), and is then deinterleaved at IC1905. The serial digital signal, which conforms to the time-base, receives the sample-rate conversion at IC926/927, and is supplied to IC2901 via IC925 (SW). The same signal processing for the above analog audio signal is performed for this signal so that the signal is recorded on the hard disk, then the resultant signal is converted into the ATA interface at IC2201 and recorded on the hard disk.

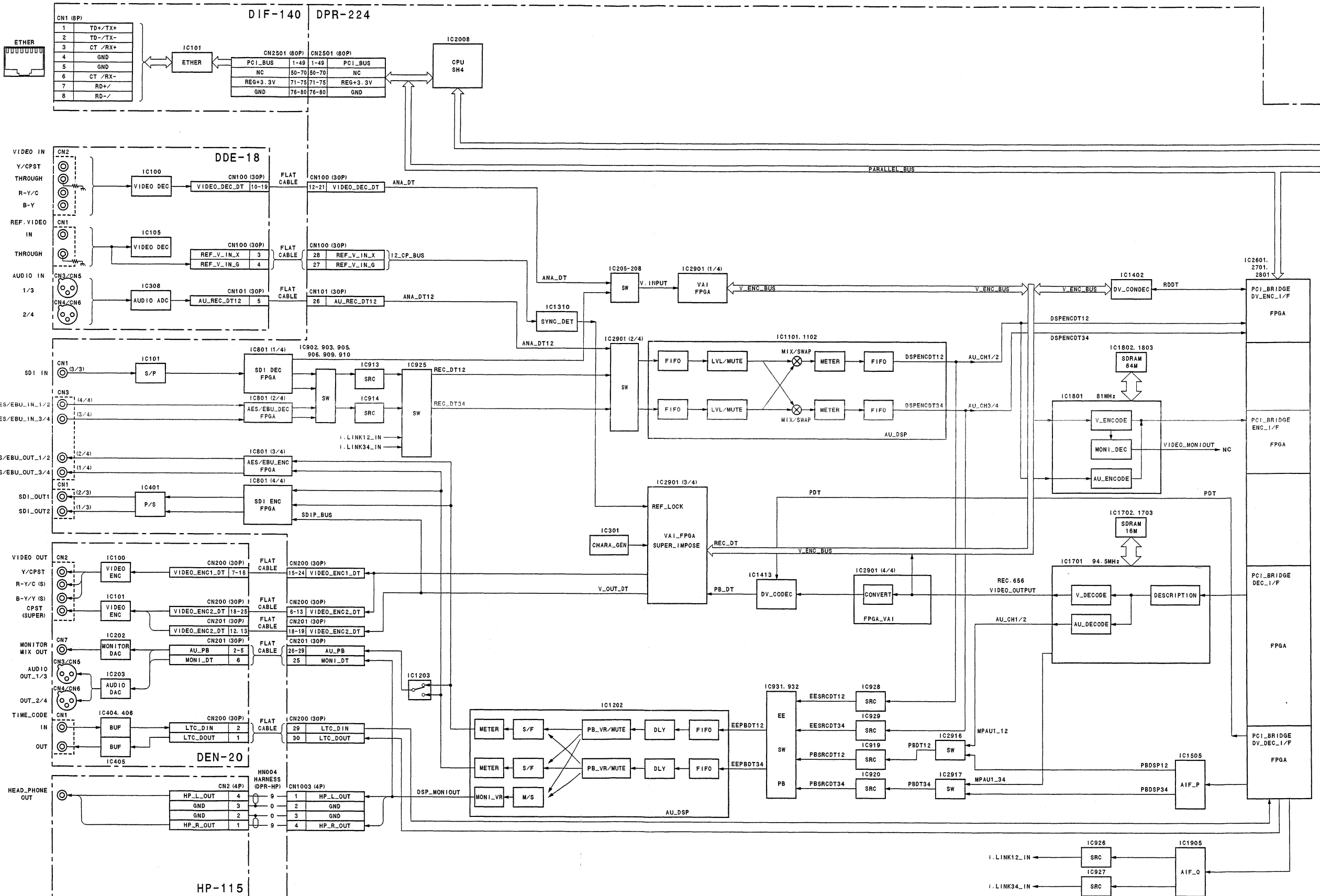
Playback System

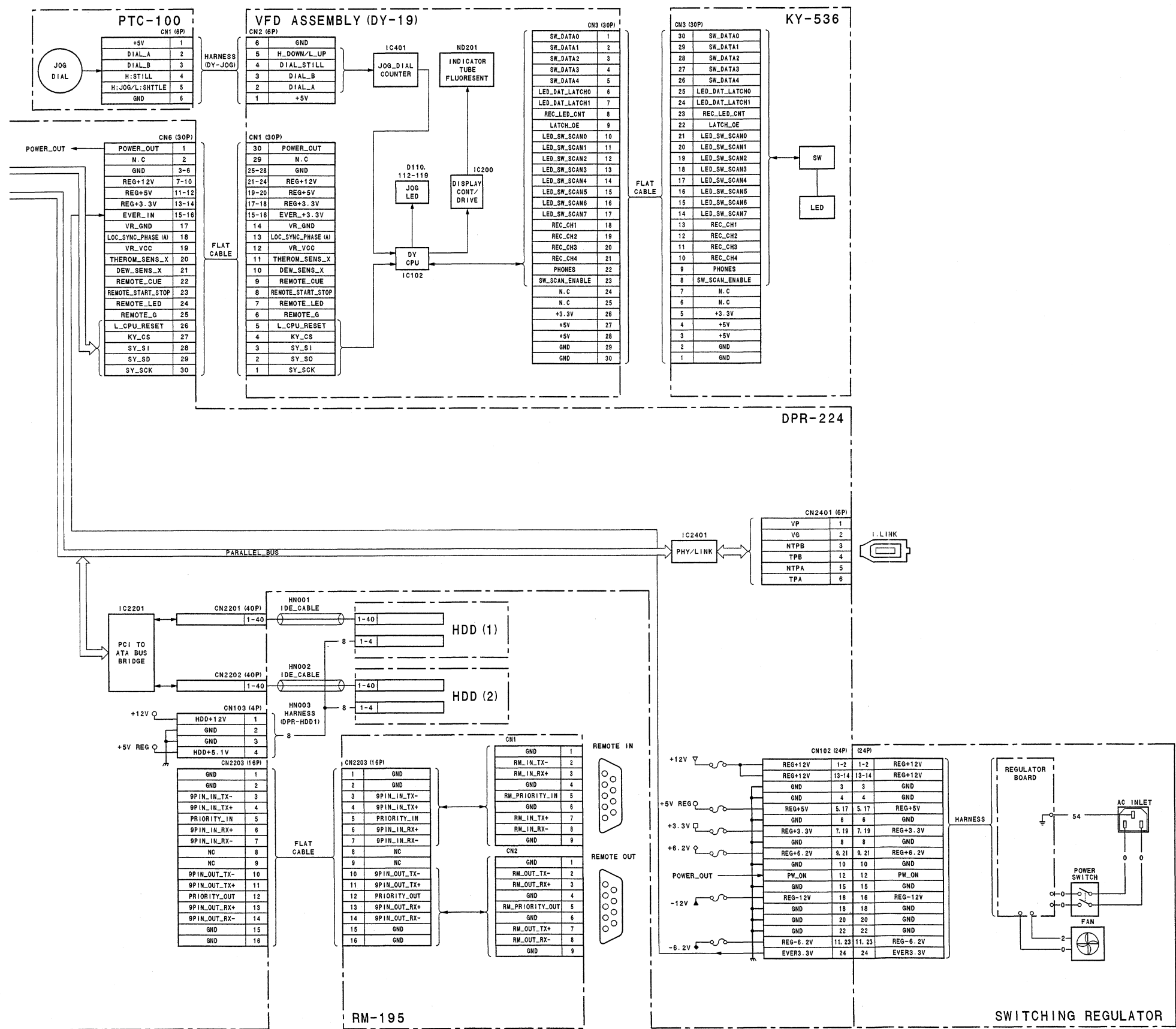
The signal recorded on the hard disk is converted from the ATA interface into the parallel bus at IC2201 on the DPR-224 board, and is converted into the DV-compressed form at IC2601/2701/2801 (FPGA). Then the resultant signal is decoded to the serial digital signal which was deinterleaved at IC1505 (DV_CODEC). The decoded audio signal is converted into the sample rate that is synchronized with the playback video at IC919/920 (sample rate converter). IC1202 (DSP) carries out signal processing such as level control and mute processing to this signal, and outputs two kinds of signals of a main line system and a monitor system. The signal of main line system is input into IC203 on the DEN-20 board to convert into the analog audio signal. The resultant signal is also supplied to IC801 and encoded into SDI AUDIO (AES/EBU serial digital signal). The monitor signal is input into IC202 on the DEN-20 board to convert into the analog MIX signal, and is then output through the MONITOR MIX OUT connector.

For i.LINK Output

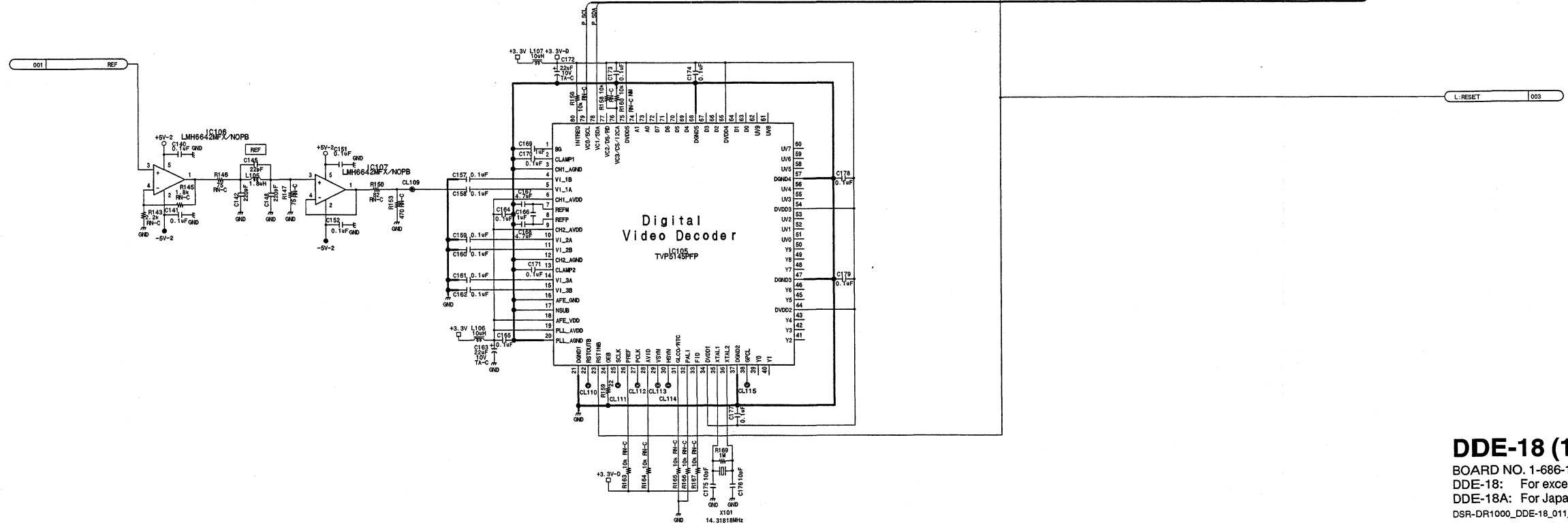
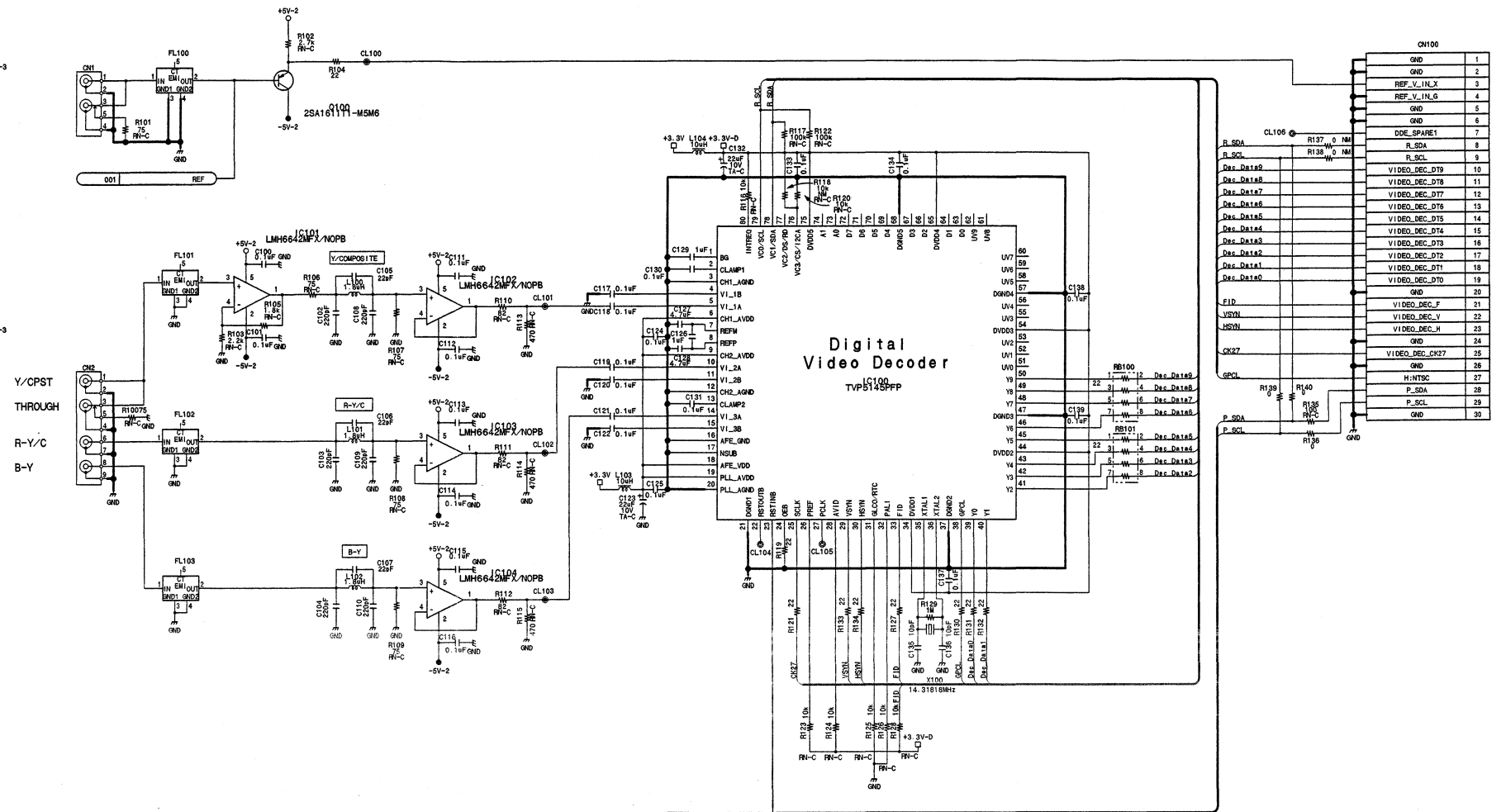
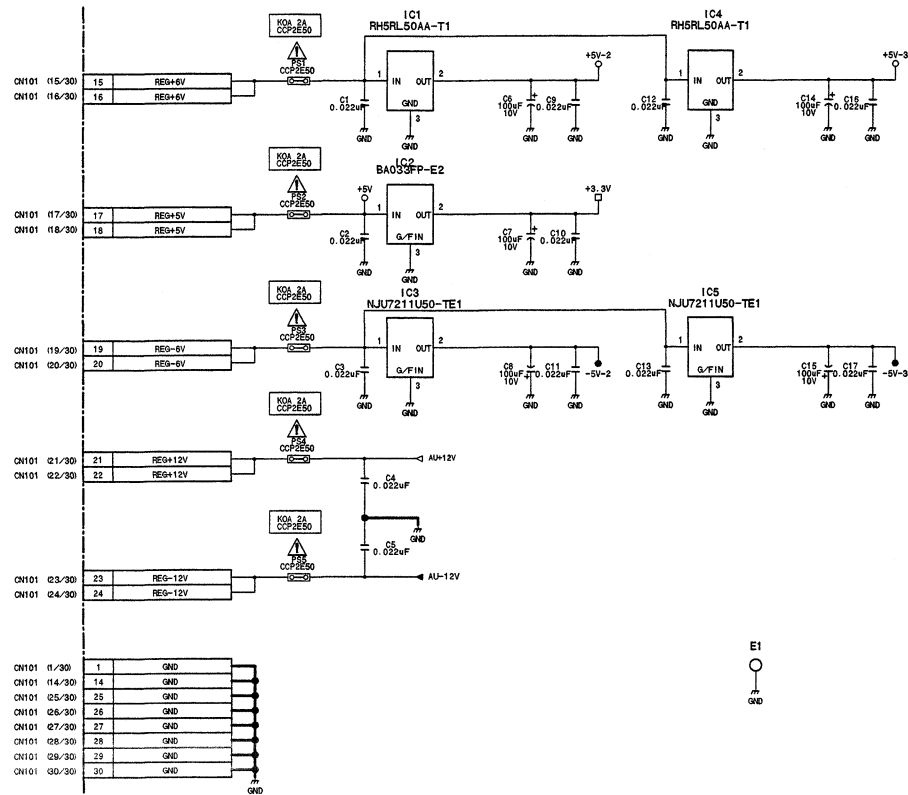
The signal recorded on the hard disk is converted from the ATA interface into the parallel bus at IC2201 on the DPR-224 board, and is then converted into the DV-compressed form at IC2601/2701/2801 (FPGA). This signal is converted into the parallel bus signal again, then supplied to IC2401 (LINK/PHY) and output through the i.LINK connector.

Overall

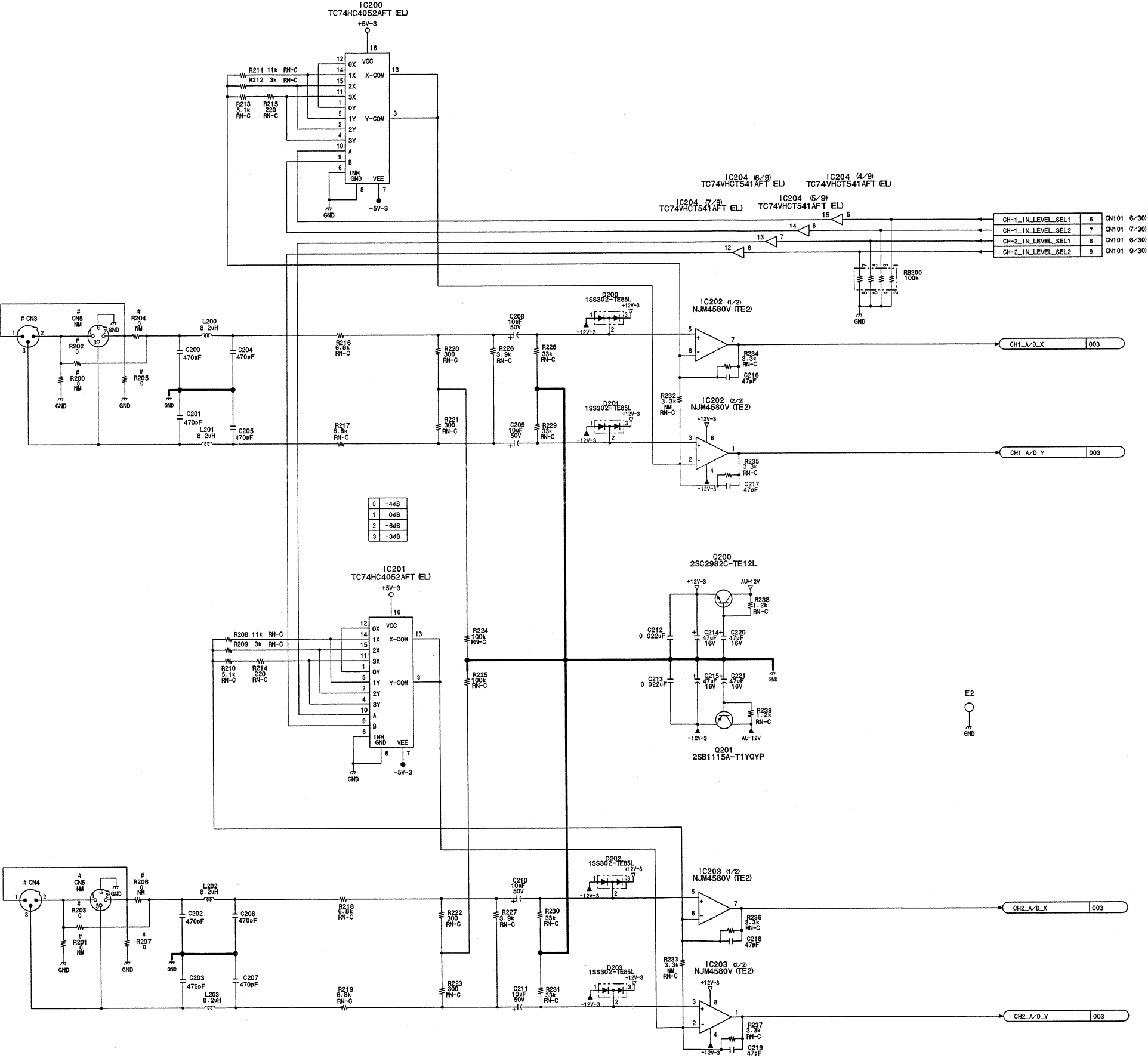




Schematic Diagrams



DDE-18 (1/3)
BOARD NO. 1-686-167-11
DDE-18: For except Japan
DDE-18A: For Japan
DSR-DR1000_DDE-18_011_1

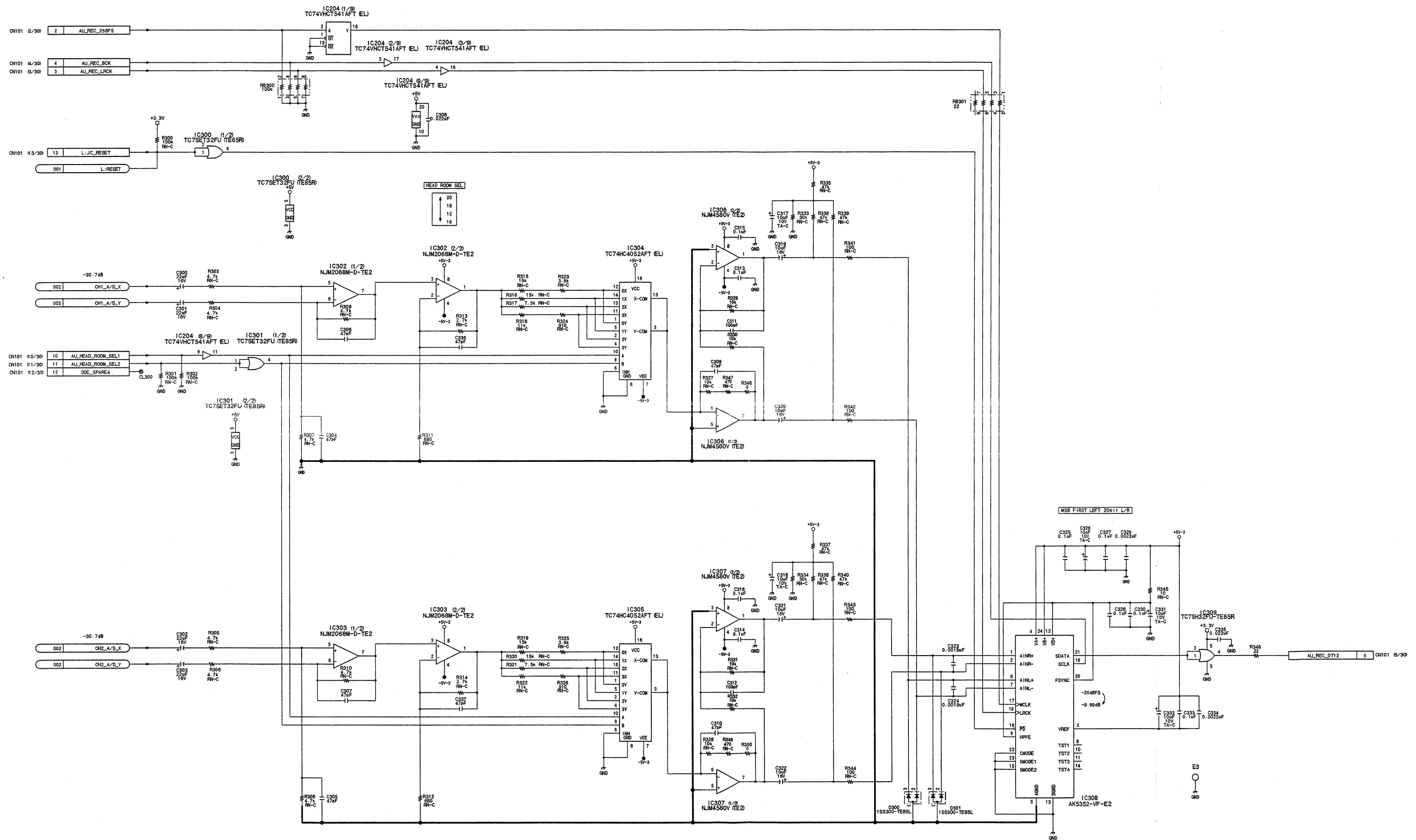


NOTE:

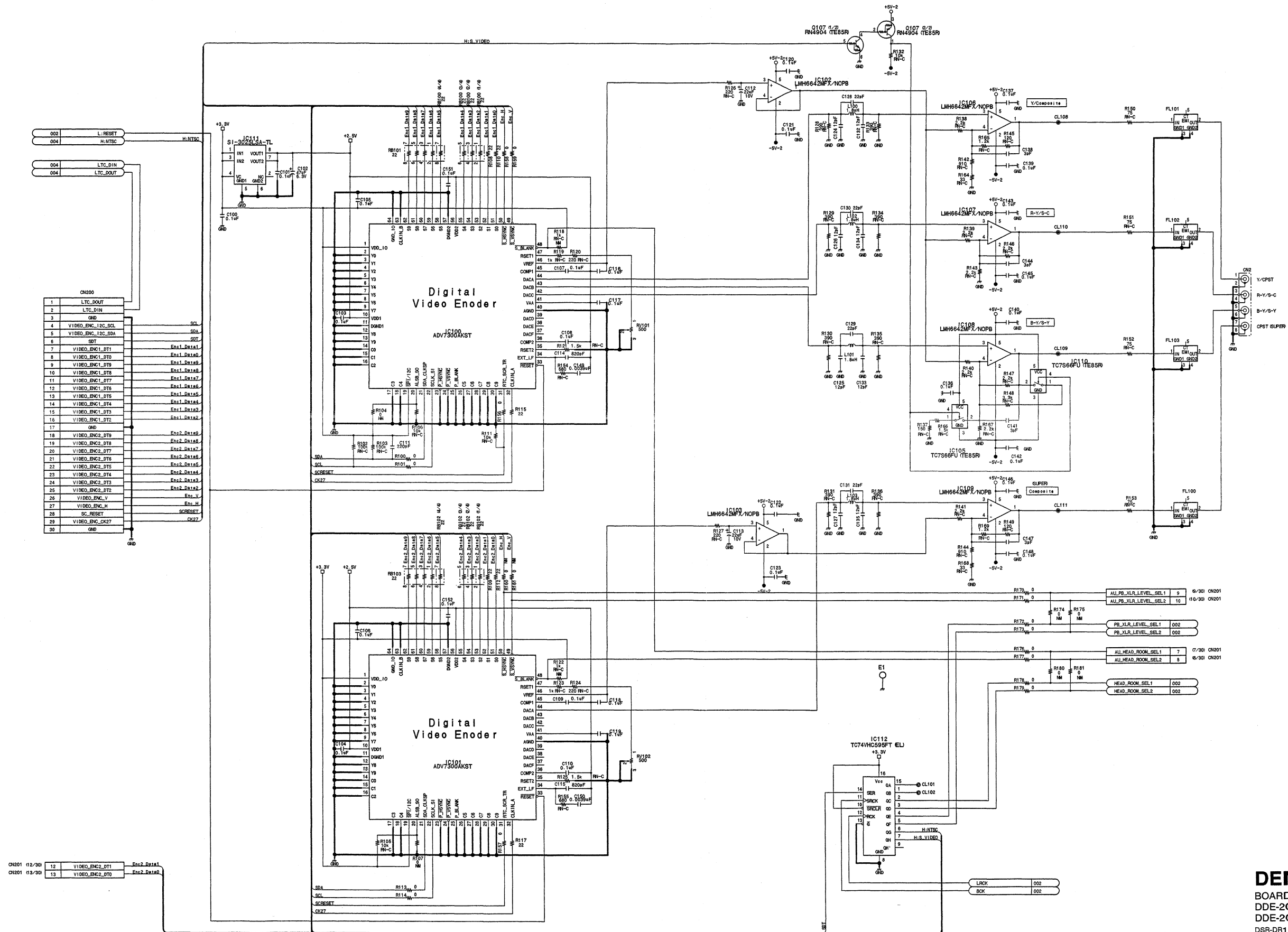
	DDE-18	DDE-18A
CN3	---	179398611 NM
CN4	---	179398611 NM
CN5	NM	---
CN6	NM	179398511
R200	NM	0
R201	NM	0
R202	0	NM
R203	0	NM
R204	NM	0
R205	0	NM
R206	NM	0
R207	0	NM

DDE-18 (2/3)
BOARD NO. 1-686-167-11
DDE-18: For except Japan
DDE-18A: For Japan
DSR-DR1000_DDE-18_011_2

DSR-DR1000/DR1000P

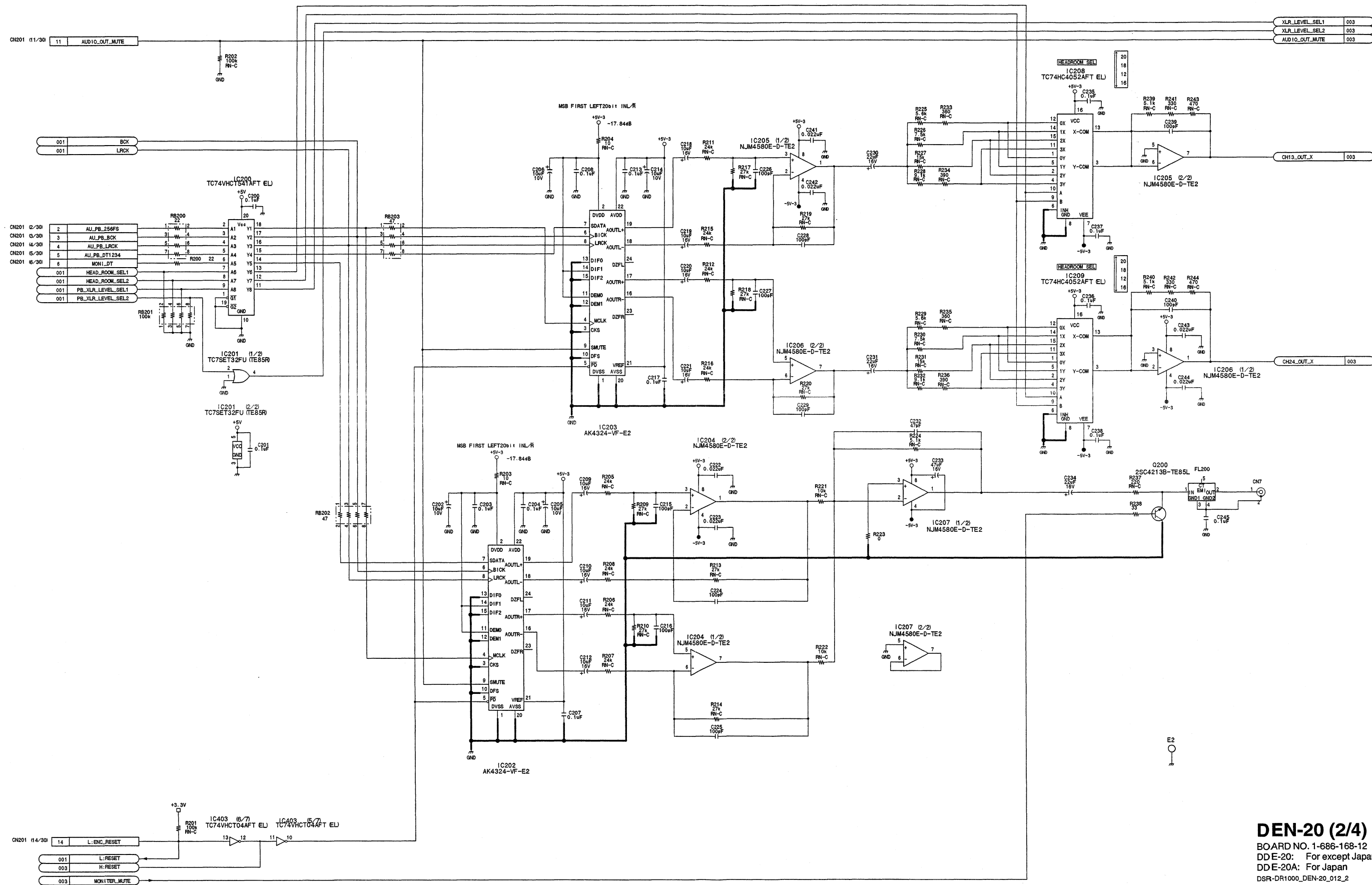


DDE-18 (3/3)
 BOARD NO. 1-686-167-11
 DDE-18: For except Japan
 DDE-18A: For Japan
 DSR-DR1000_DDE-18_011_3

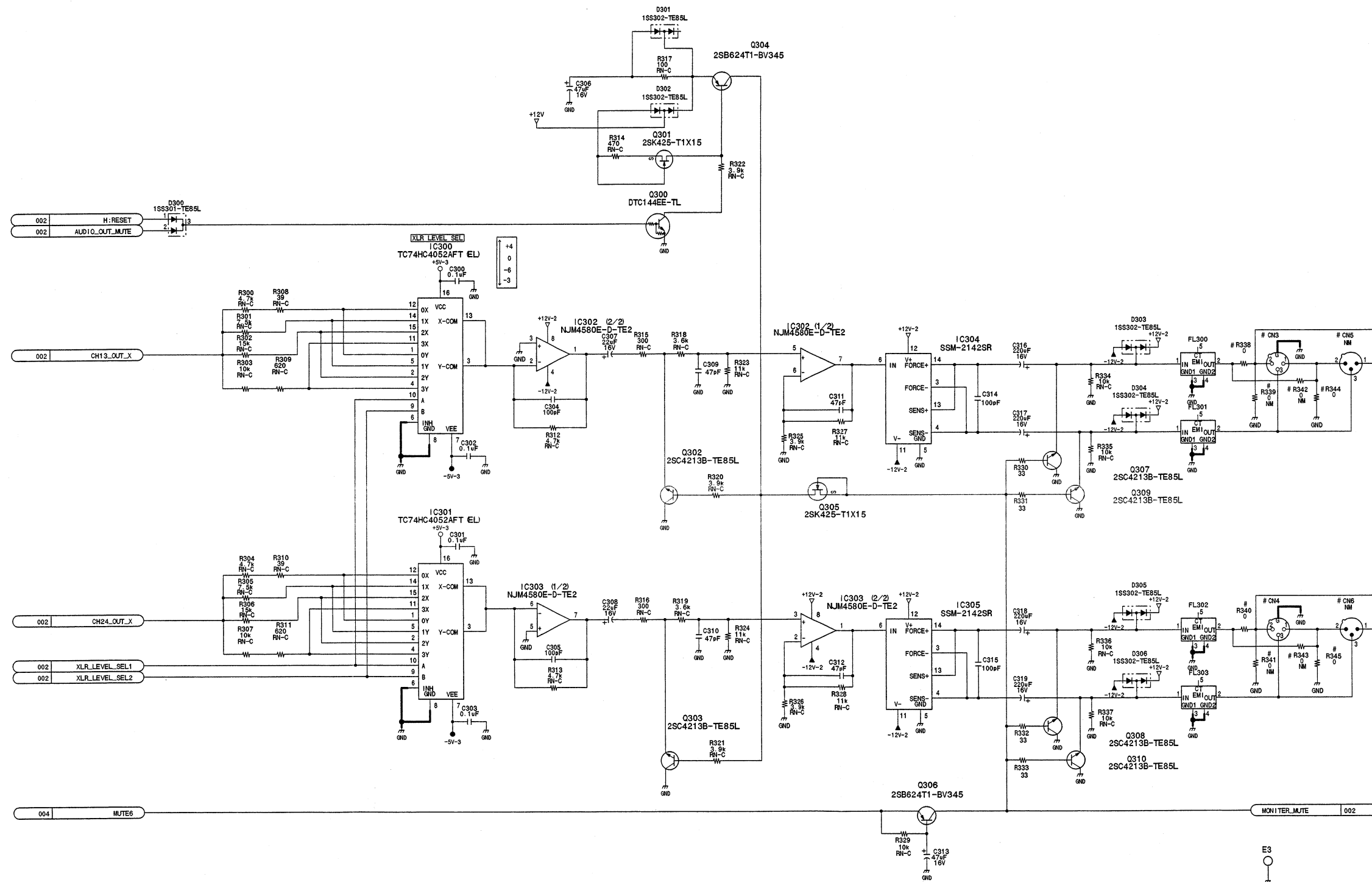


DEN-20 (1/4)

BOARD NO. 1-686-168-12
DDE-20: For except Japan
DDE-20A: For Japan
DSR-DR1000_DEN-20_012_1



DEN-20 (2/4)
BOARD NO. 1-686-168-12
DDE-20: For except Japan
DDE-20A: For Japan
DSR-DR1000_DEN-20_012_2

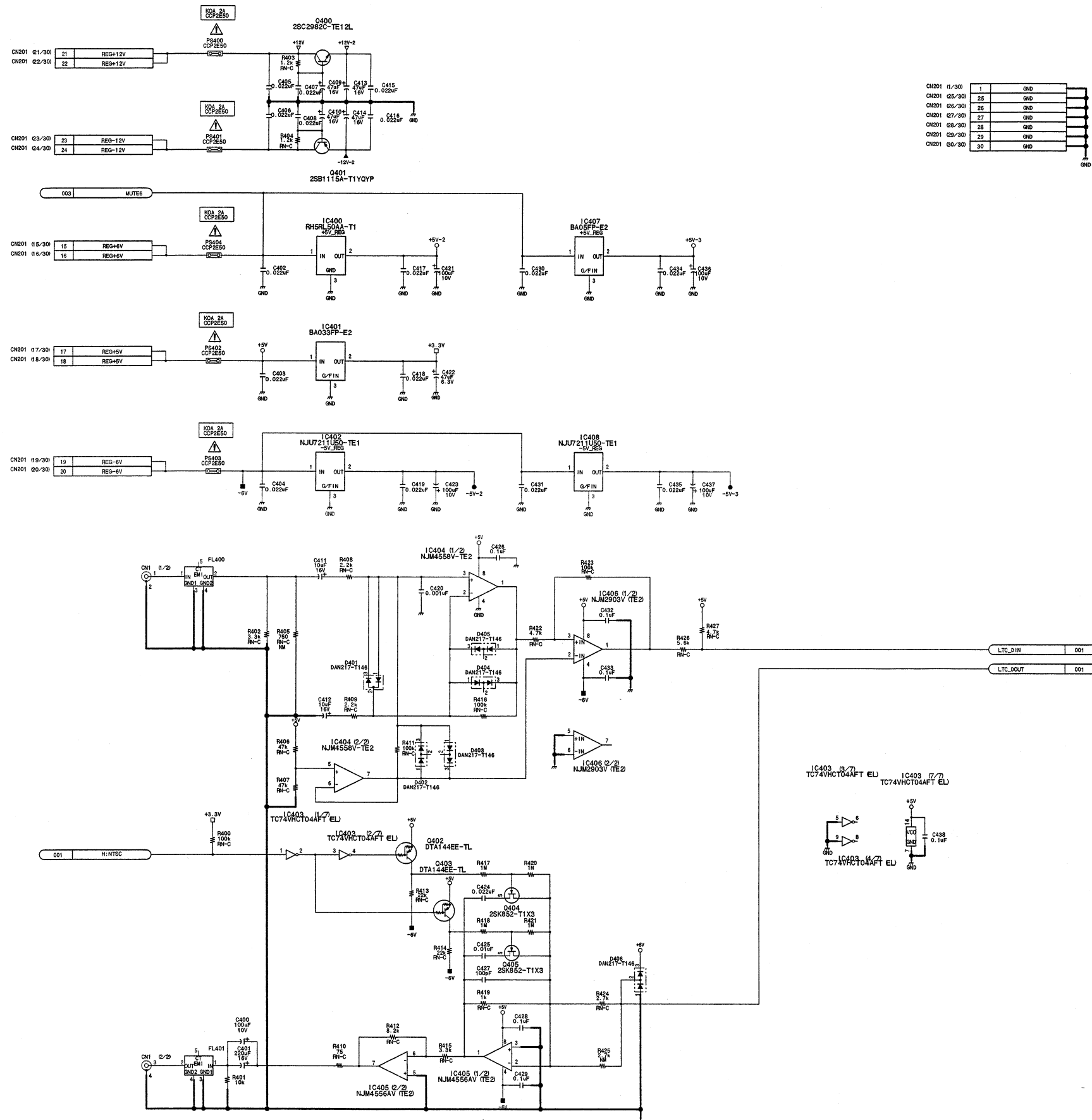


NOTE:

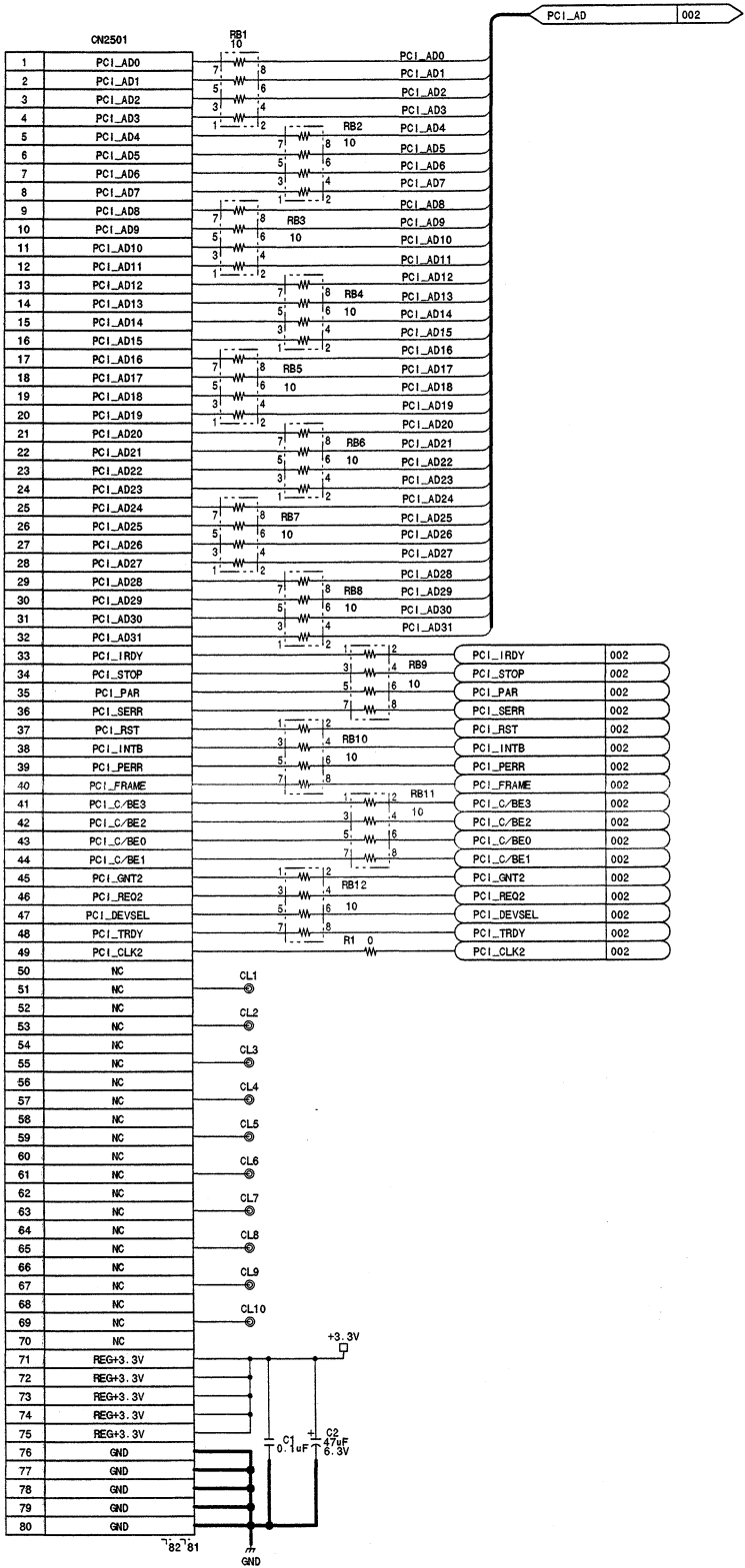
	DEN-20	DEN-20A
CN3	---	NM
CN4	179398511	NM
CN5	NM	179398511
CN6	NM	179398511
R338	0	NM
R339	NM	0
R340	0	NM
R341	NM	0
R342	NM	0
R343	NM	0
R344	0	NM
R345	0	NM

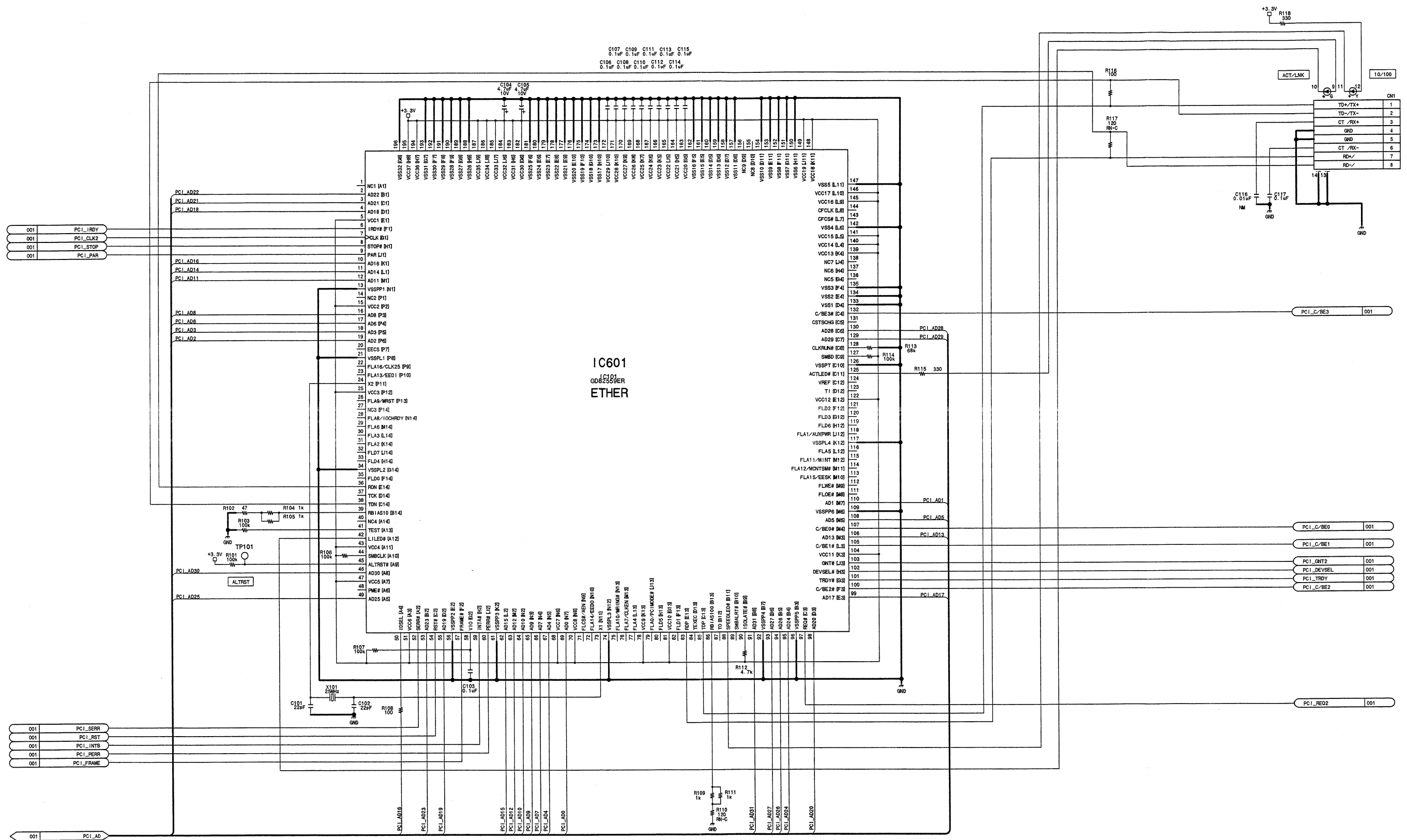
DEN-20 (3/4)
 BOARD NO. 1-686-168-12
 DDE-20: For except Japan
 DDE-20A: For Japan
 DSR-DR1000_DEN-20_012_3

DSR-DR1000/DR1000P

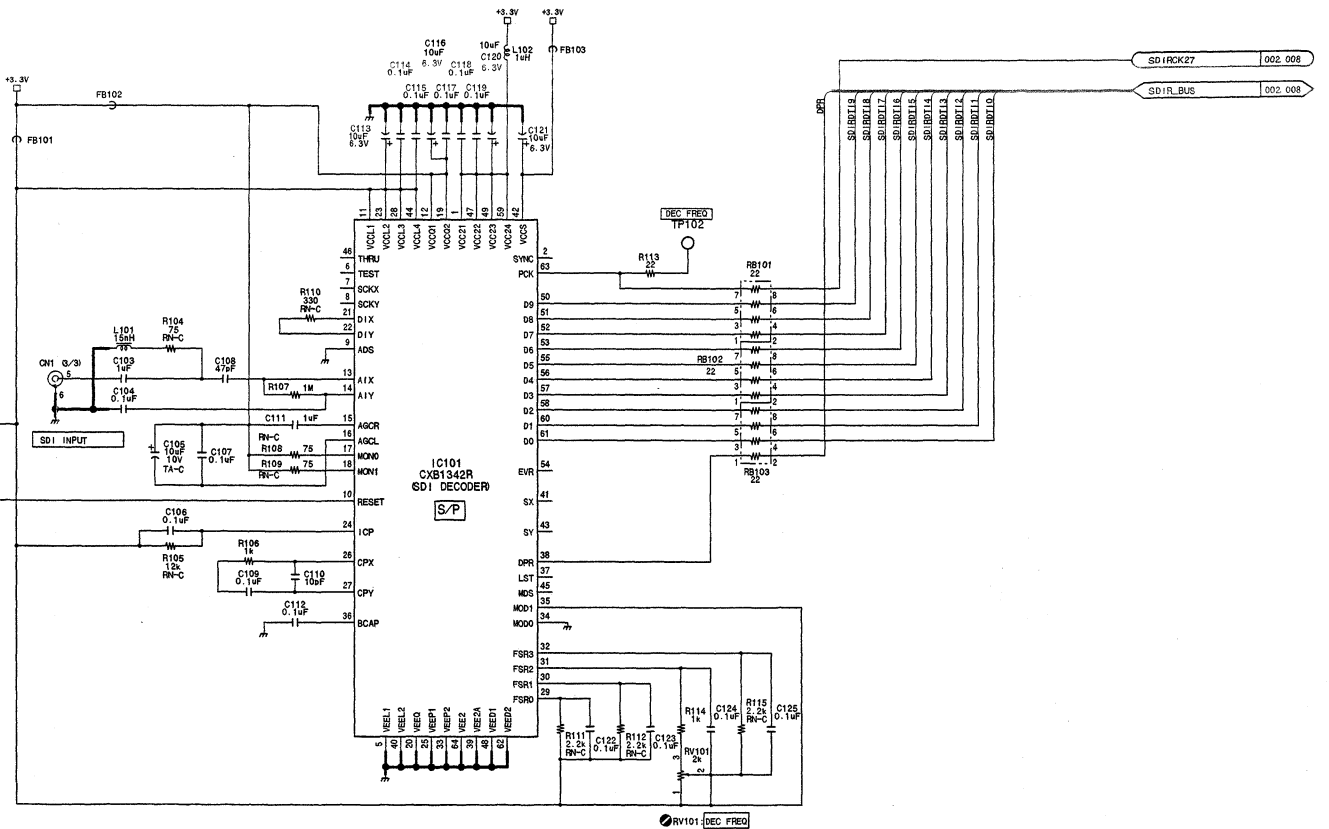
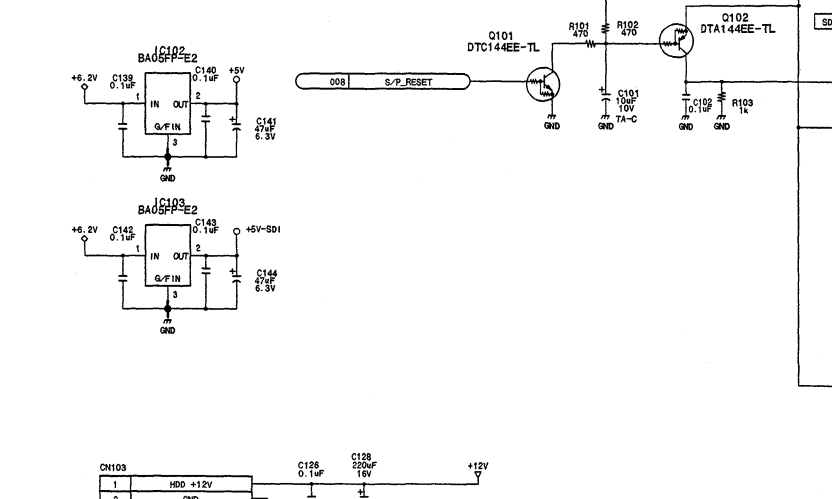
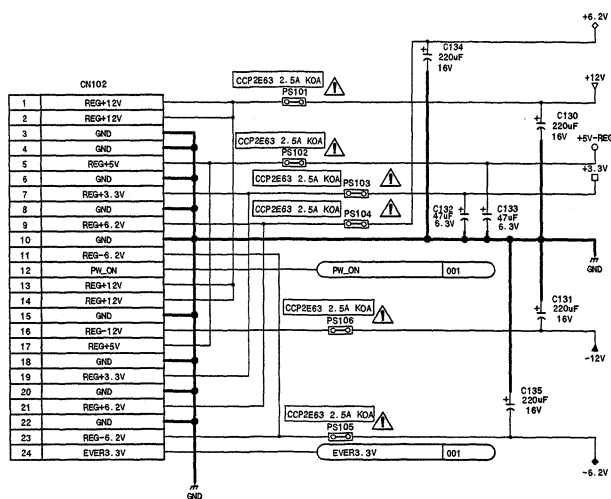
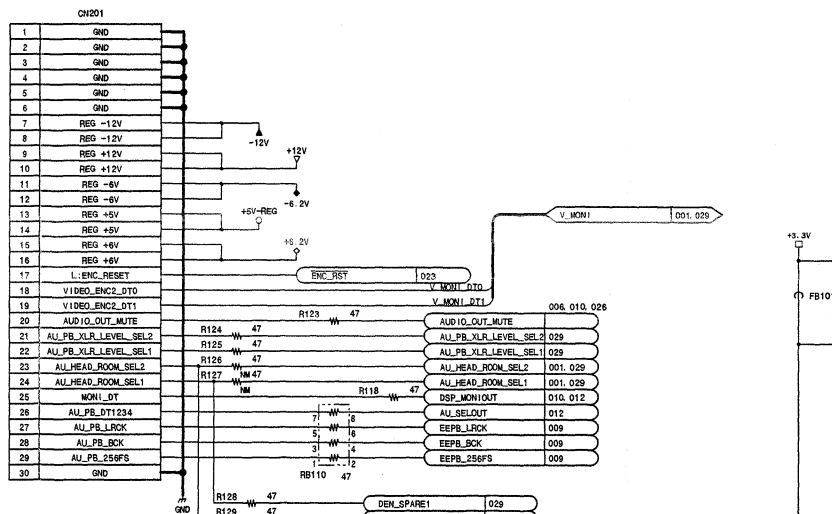
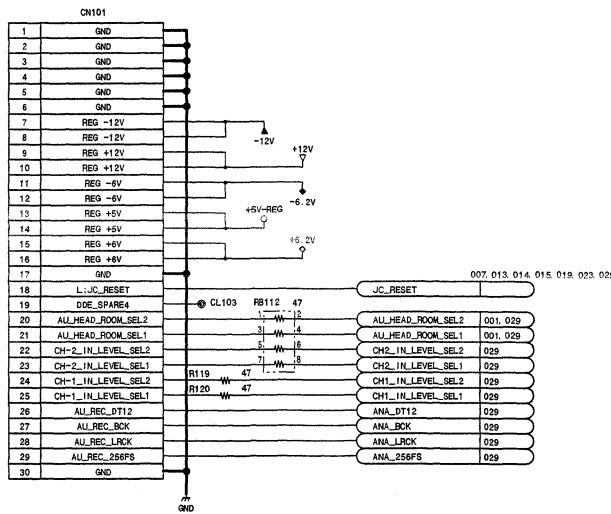
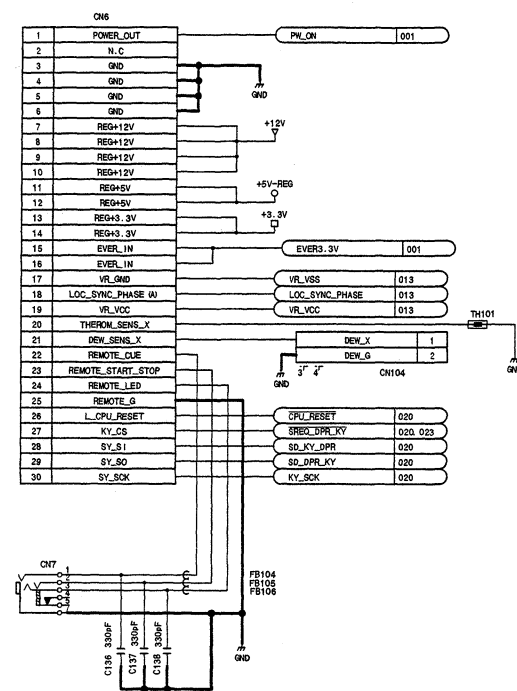
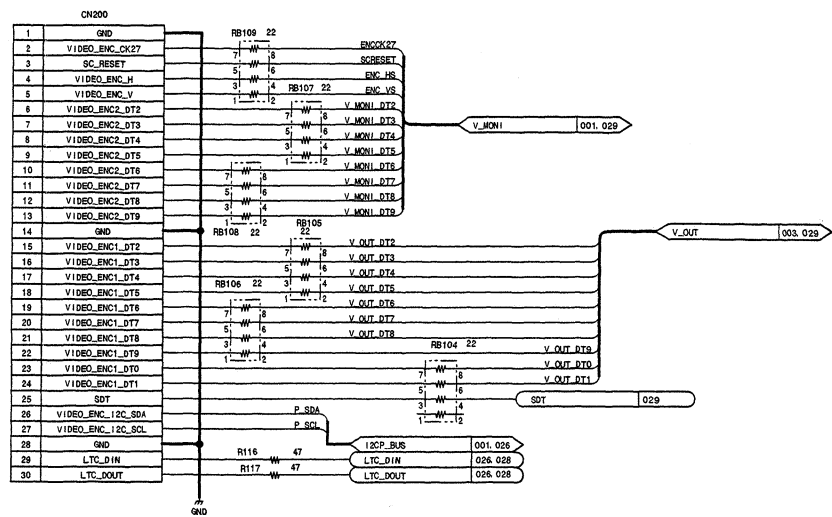
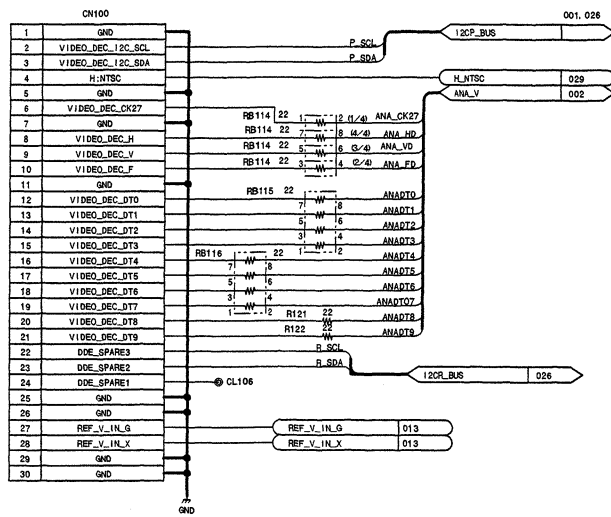


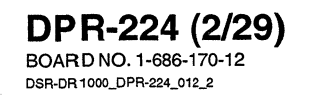
DEN-20 (4/4)
 BOARD NO. 1-686-168-12
 DDE-20: For except Japan
 DDE-20A: For Japan
 DSR-DR1000_DEN-20_012_4



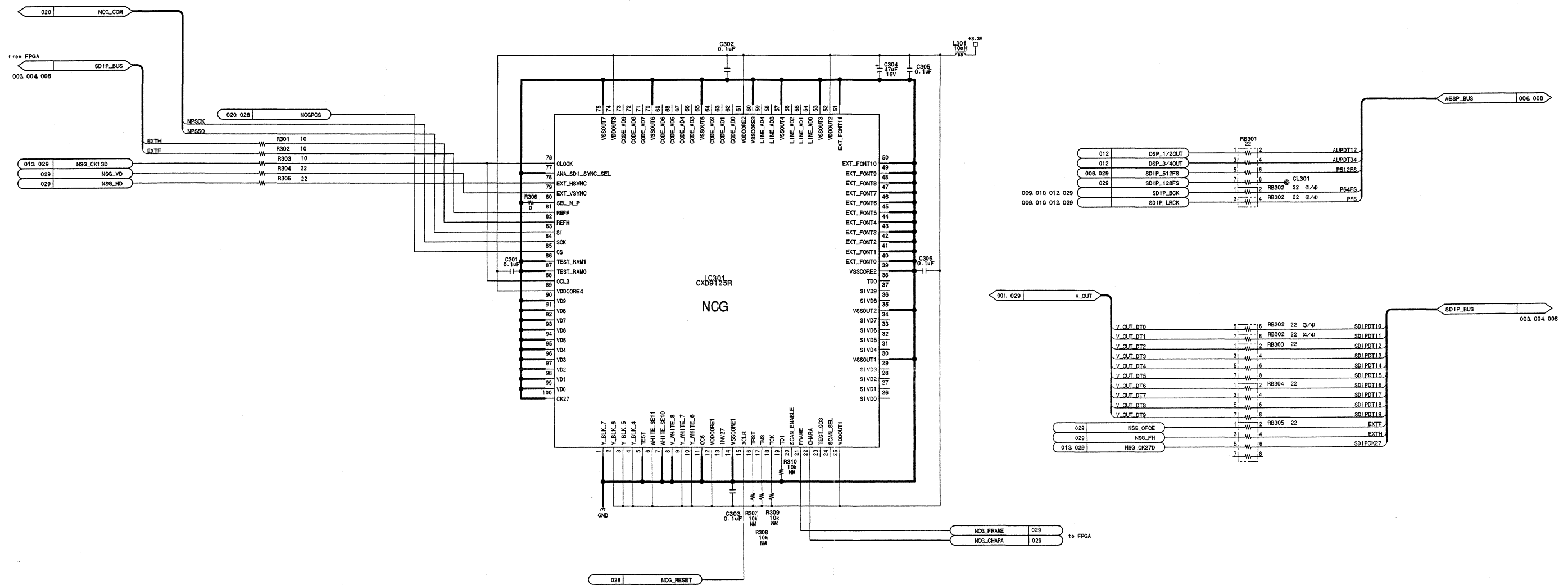


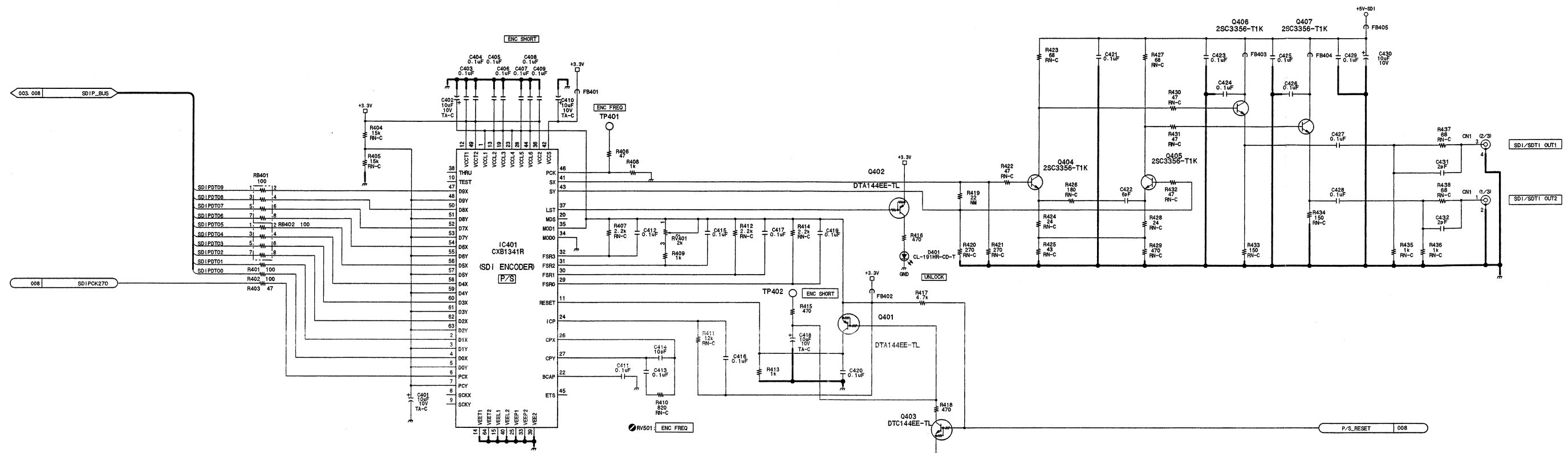
DIF-140 (2/2)
BOARD NO. 1-686-169-12
DSR-DR1000_DIF-140_012_2





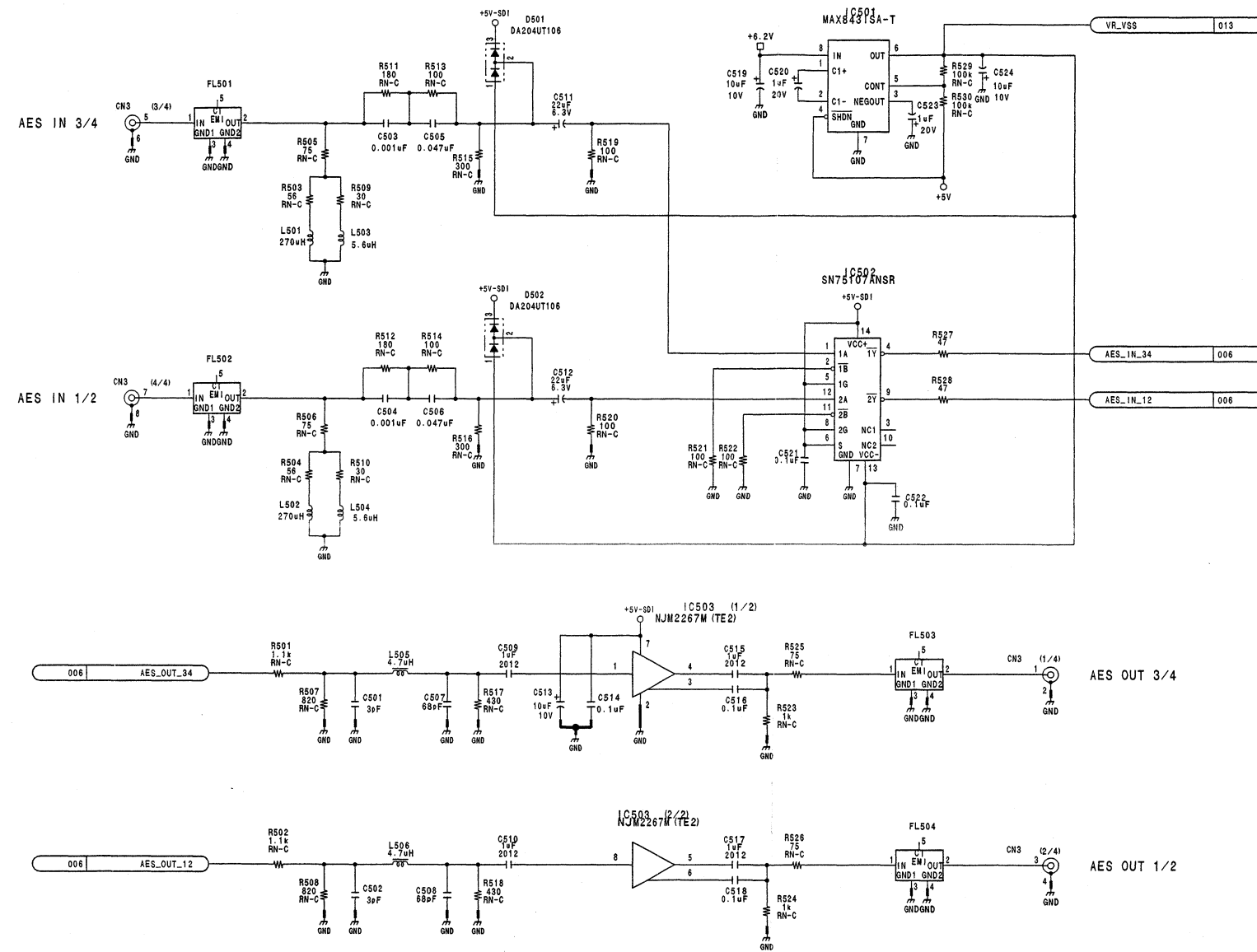
5

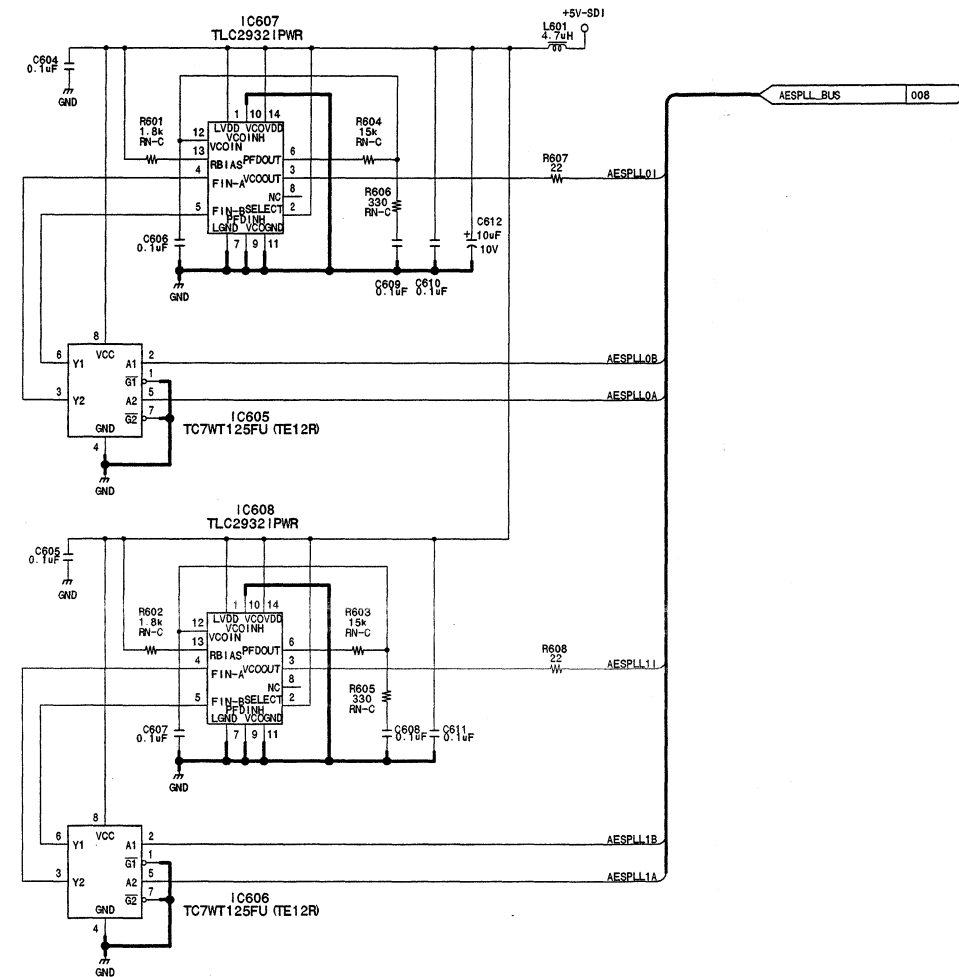
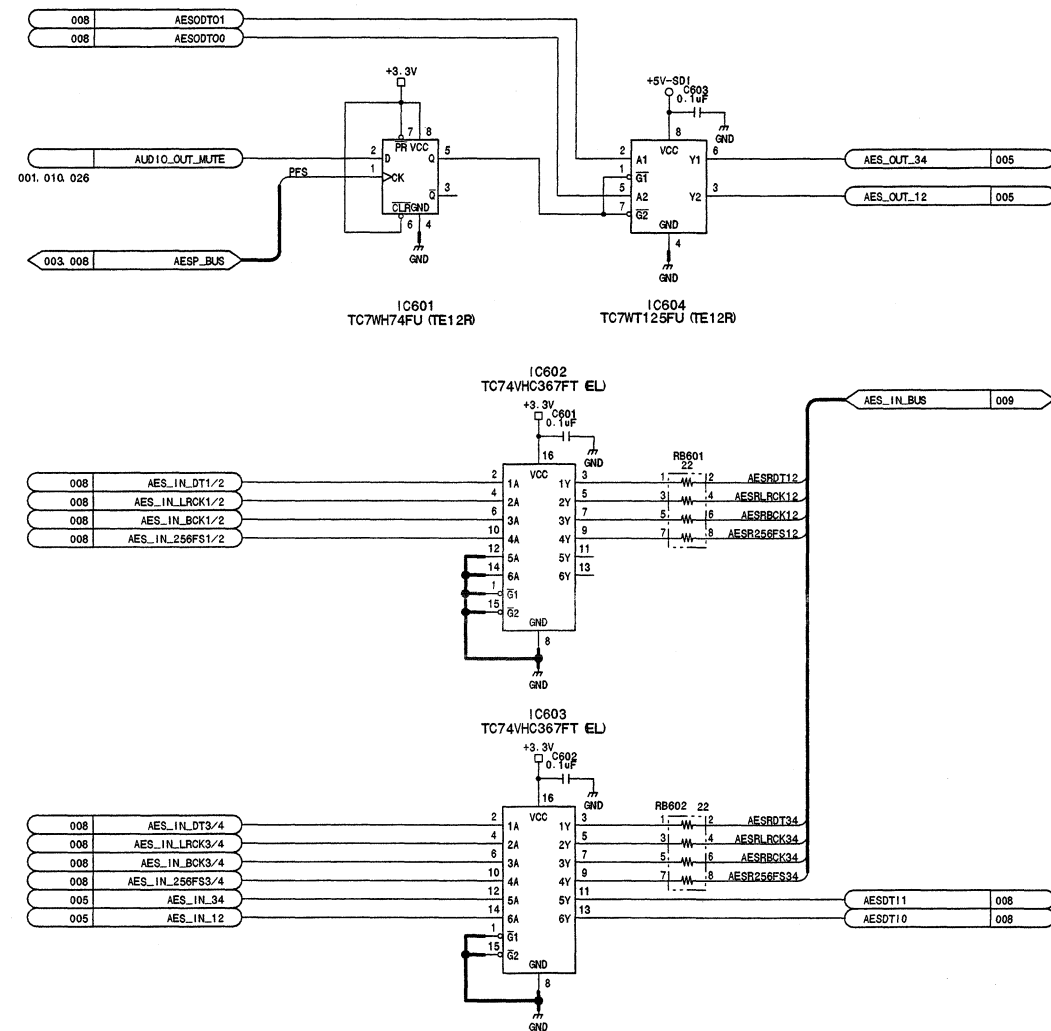


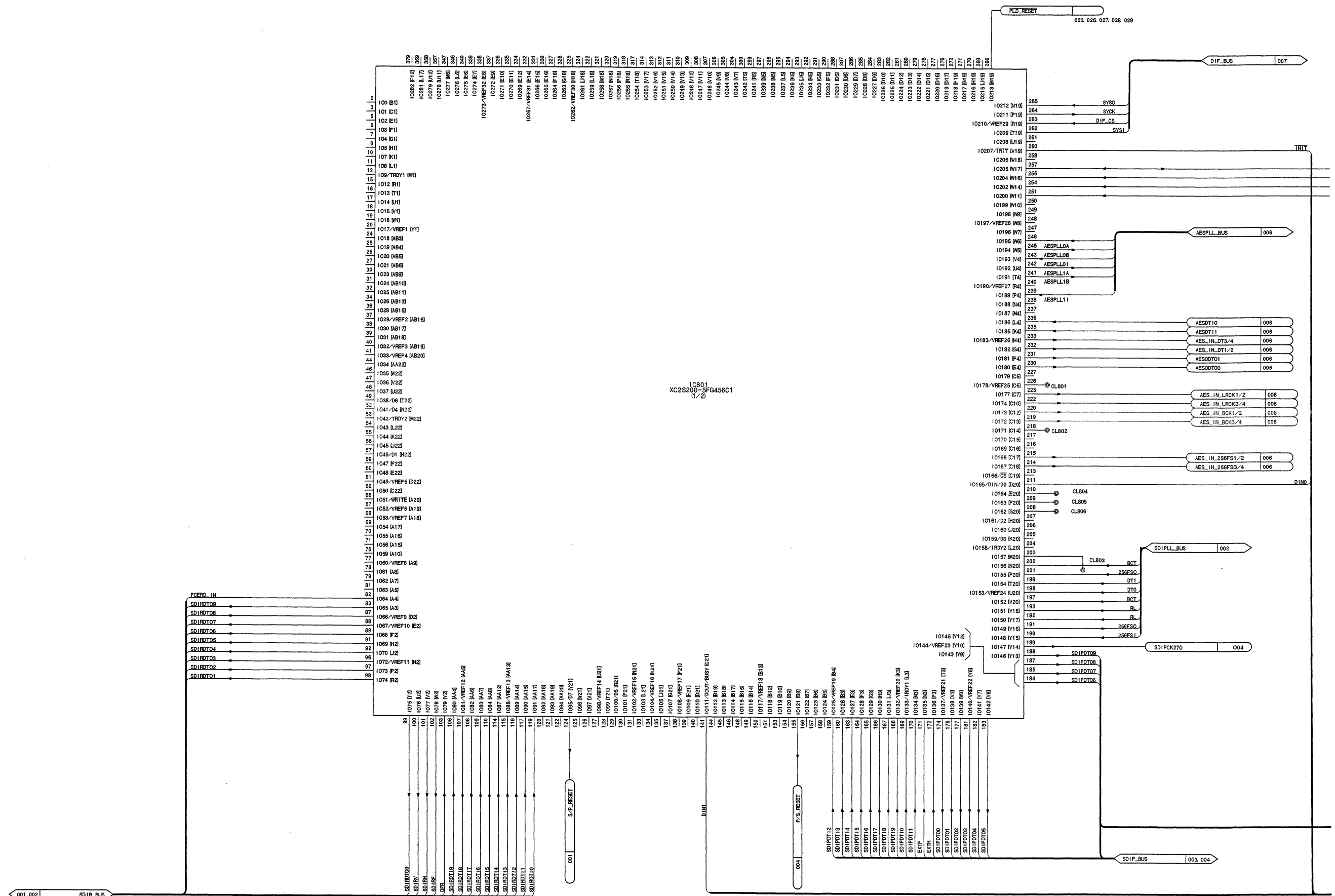


DPR-224 (4/29)

BOARD NO. 1-686-170-12
DSR-DR1000_DPR-224_012_4



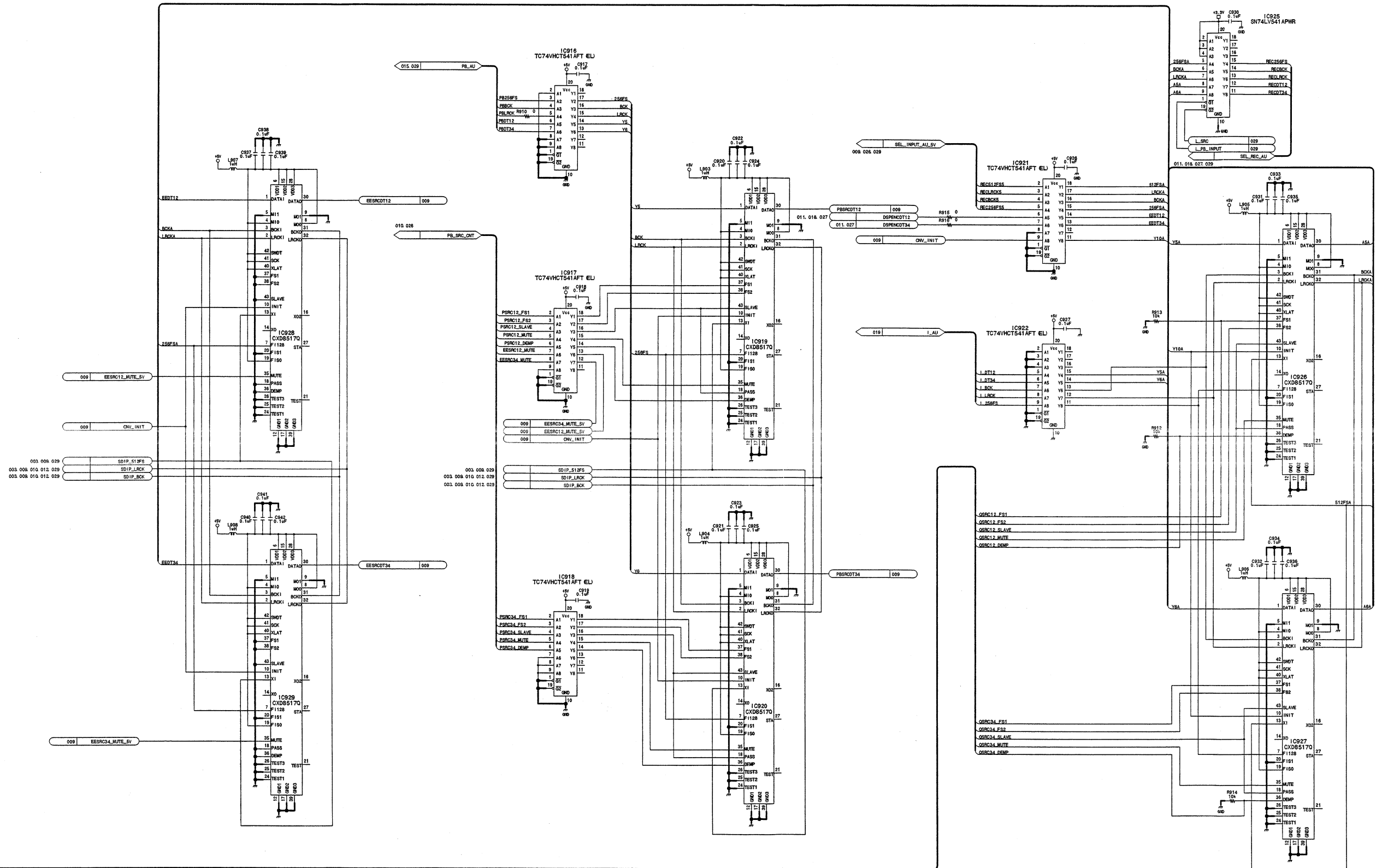


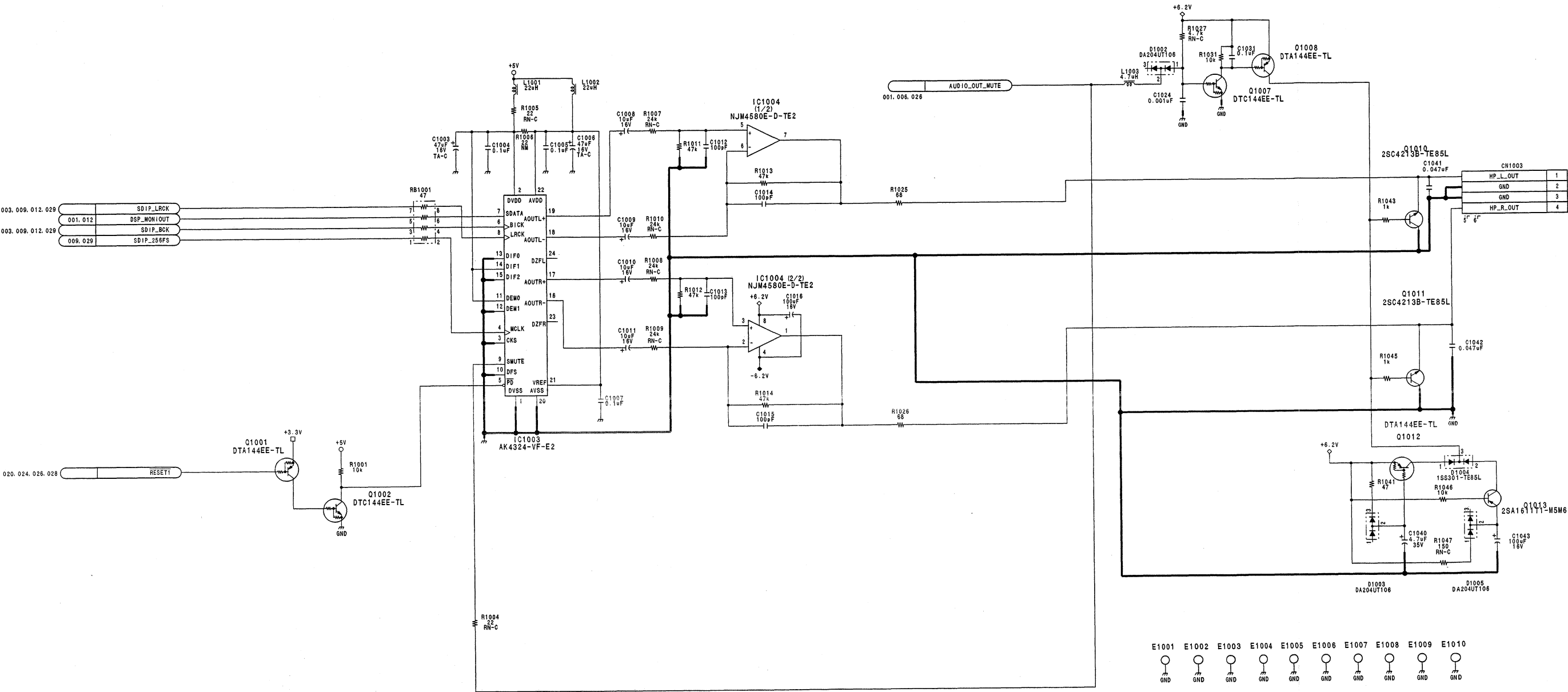


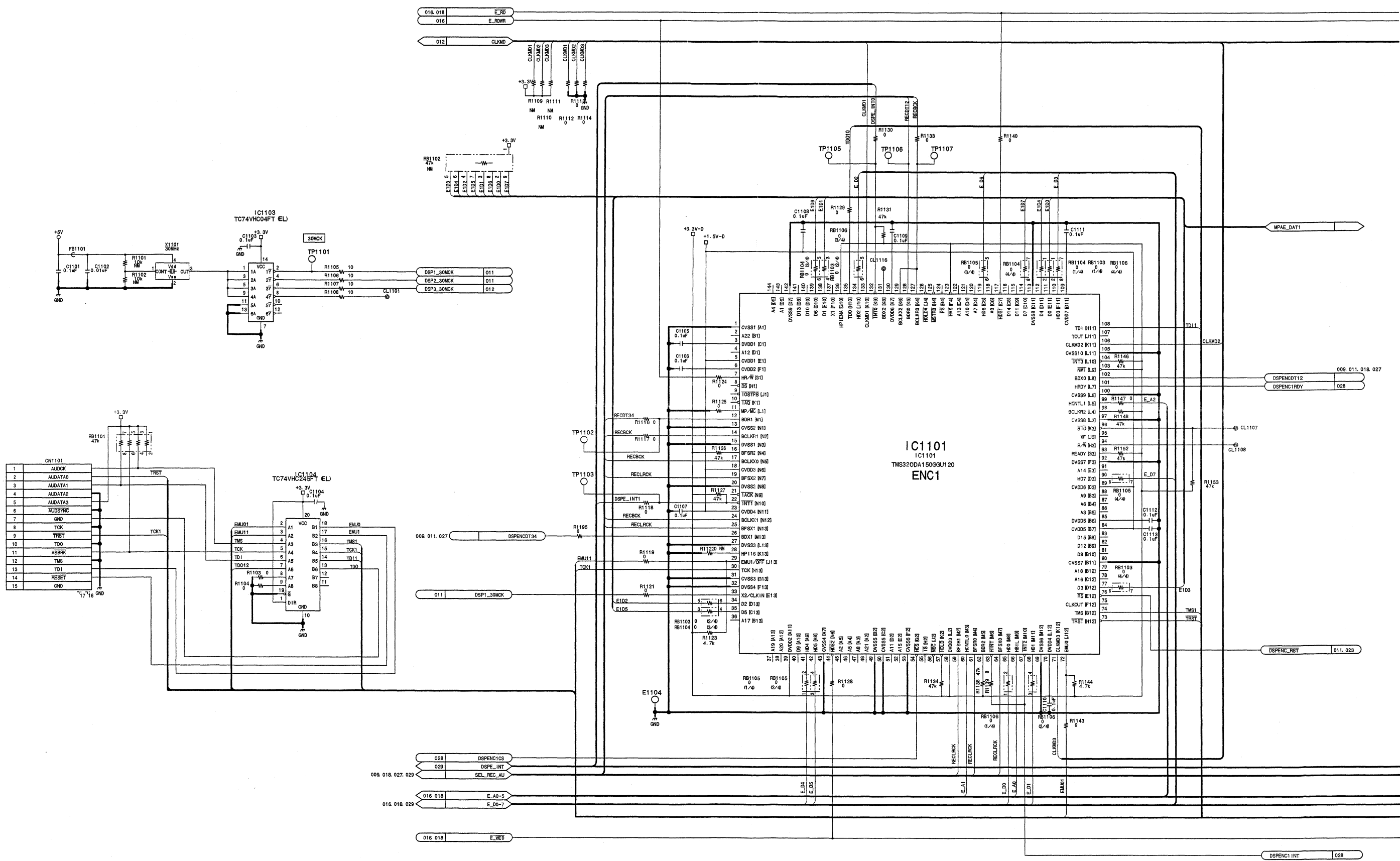


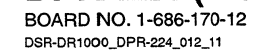
BOARD NO. 1-686-170-12
DSR-DR1000_DPR-224_012_8

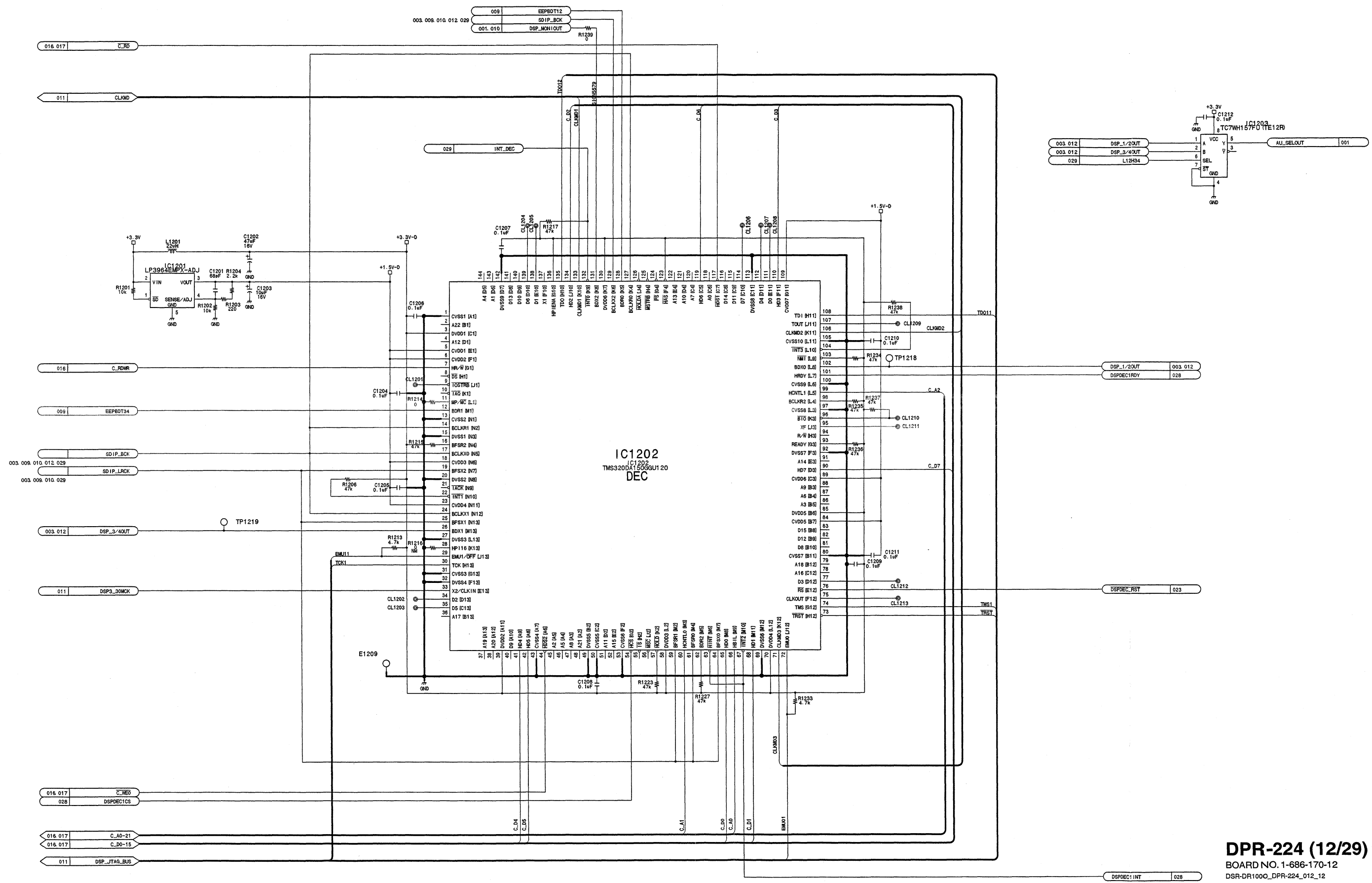


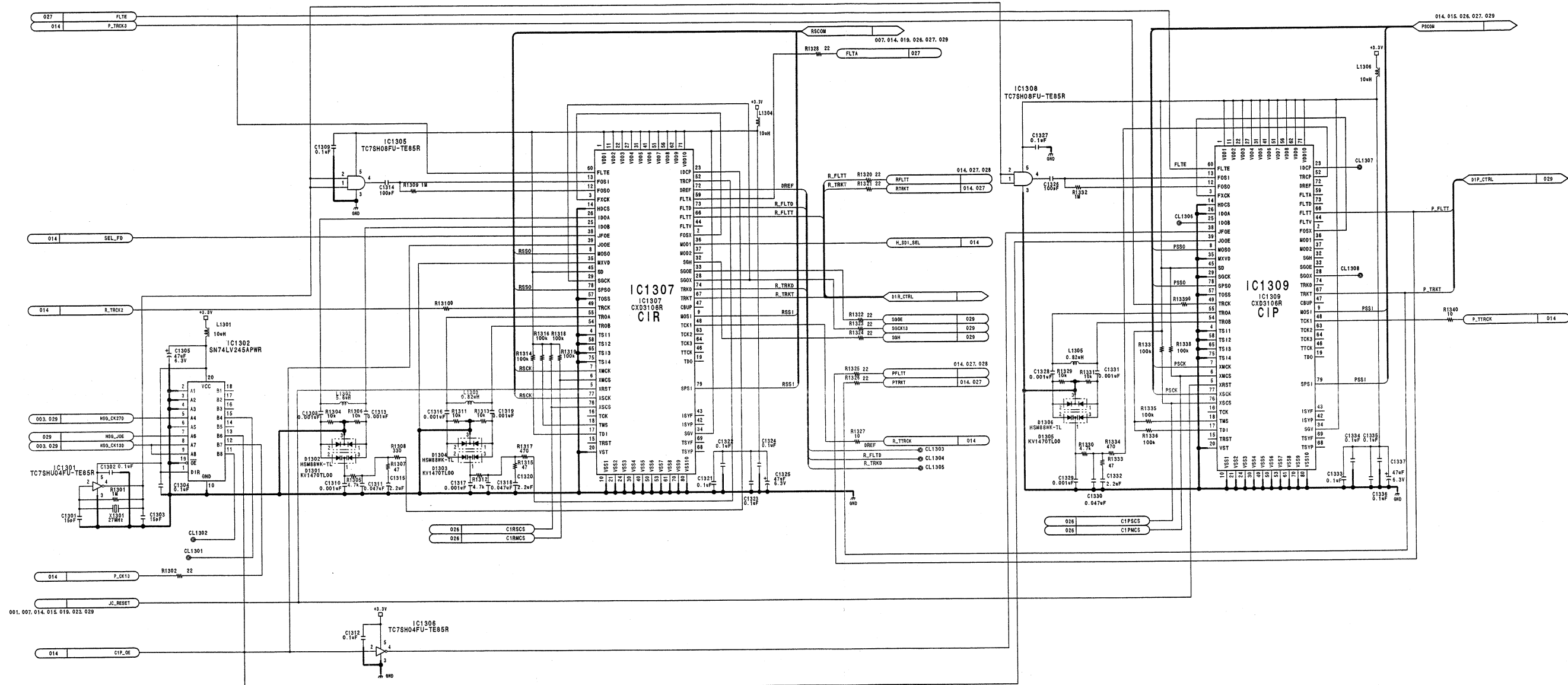


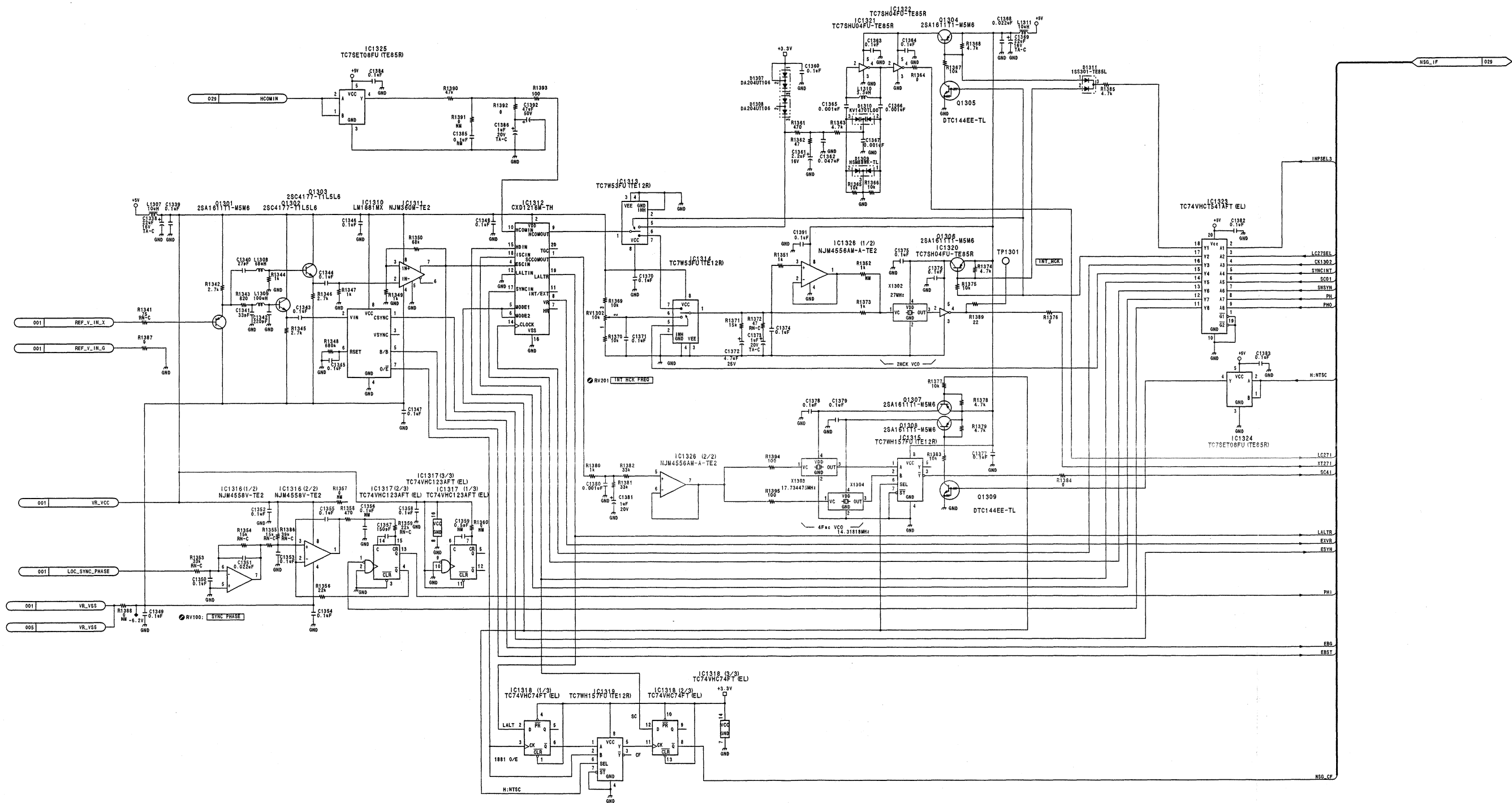


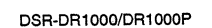




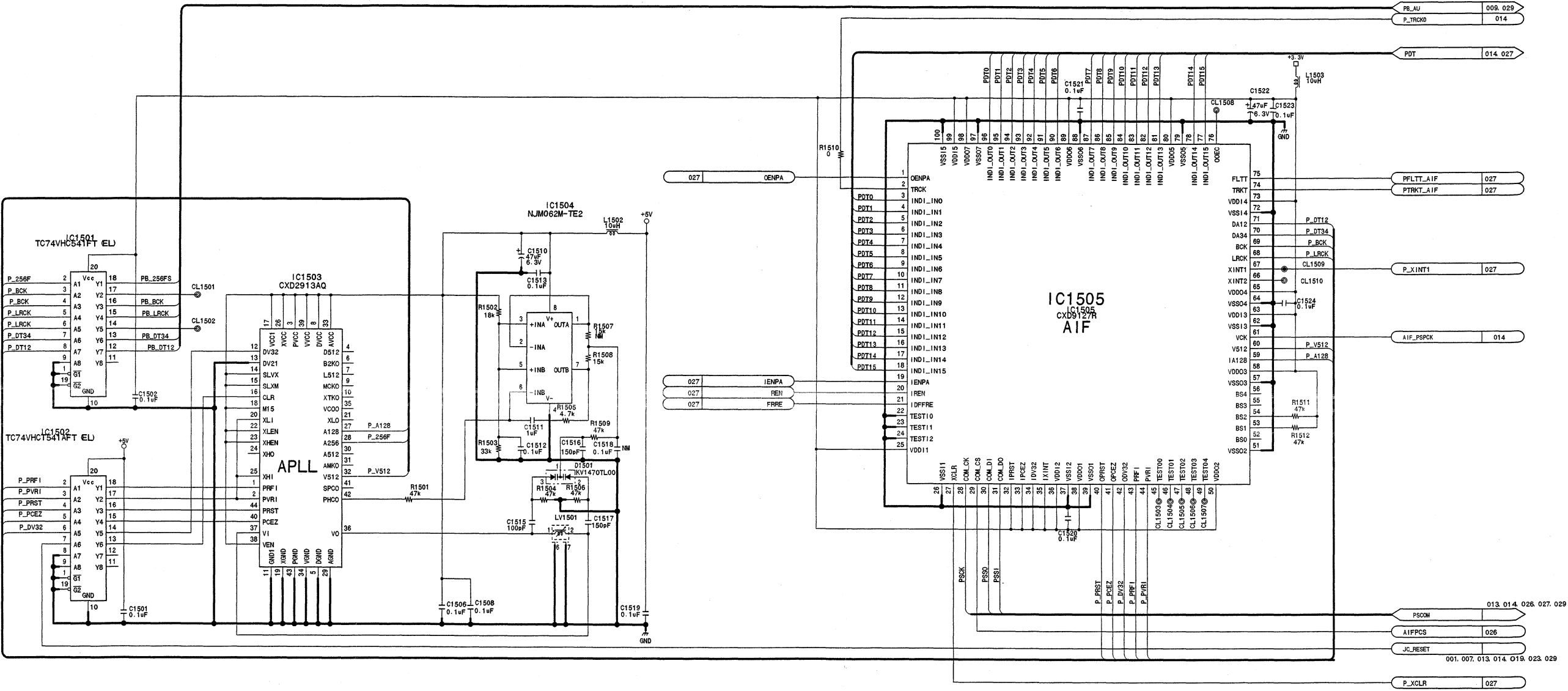




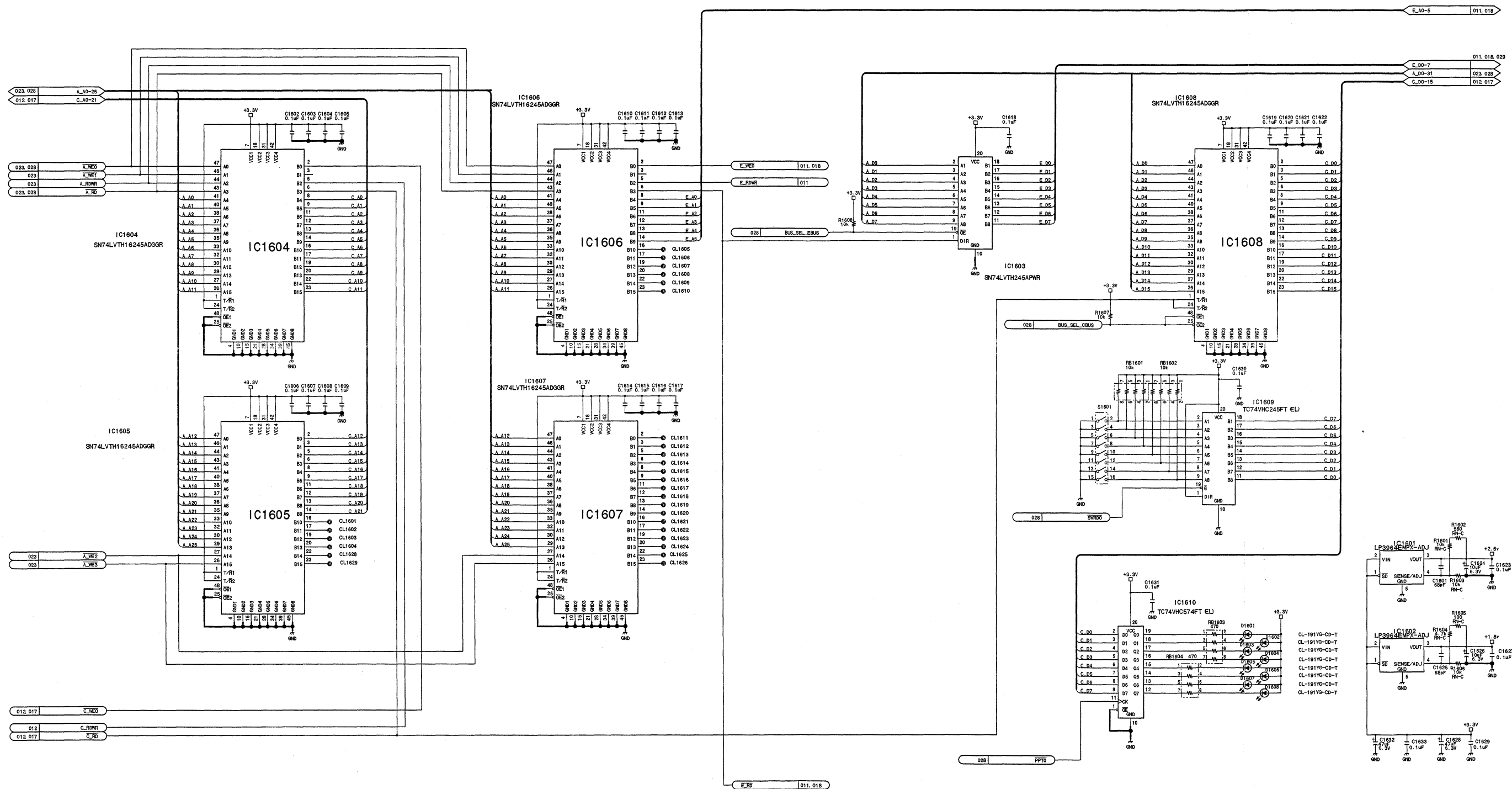




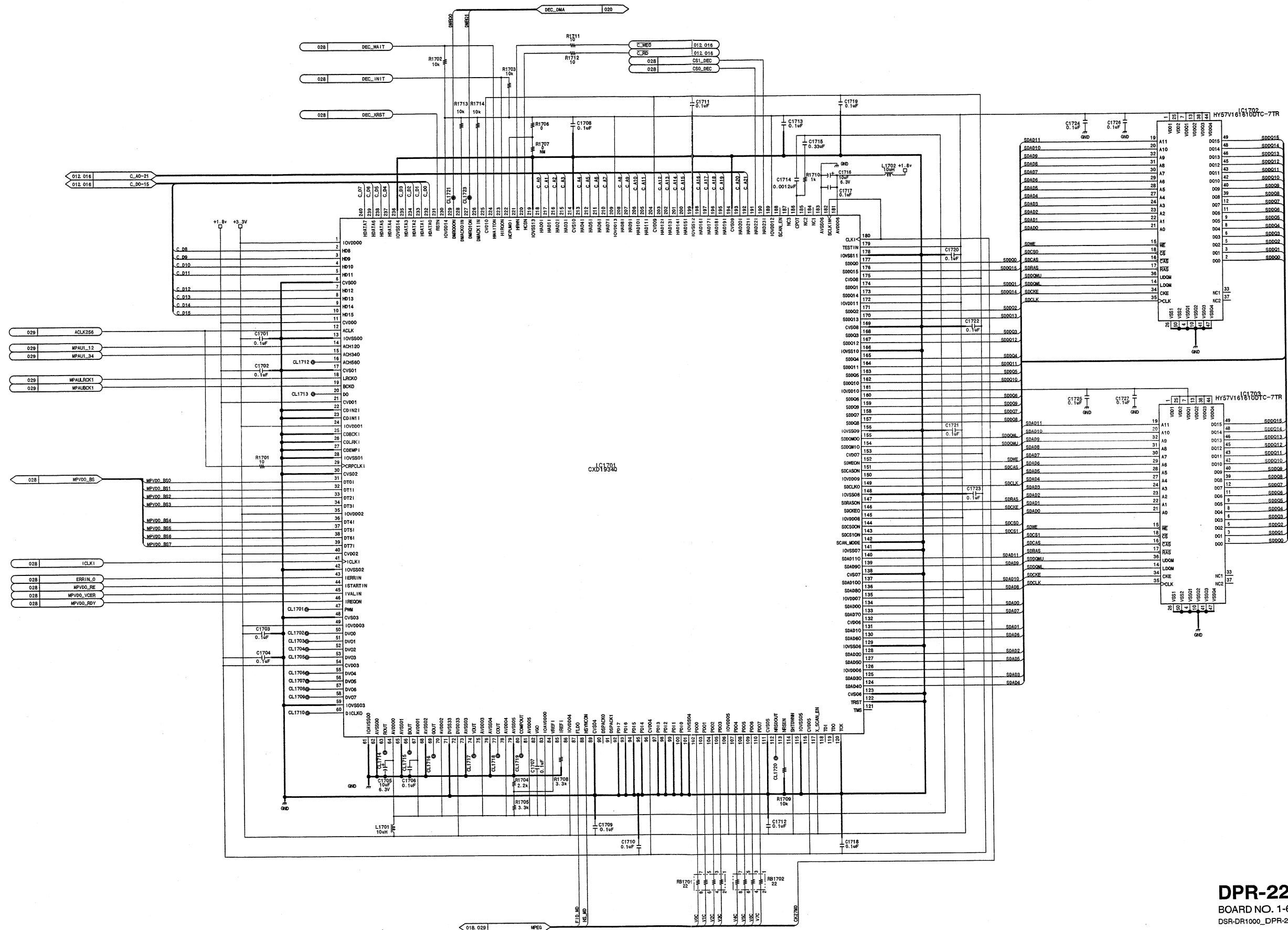




SYSTEM BUS



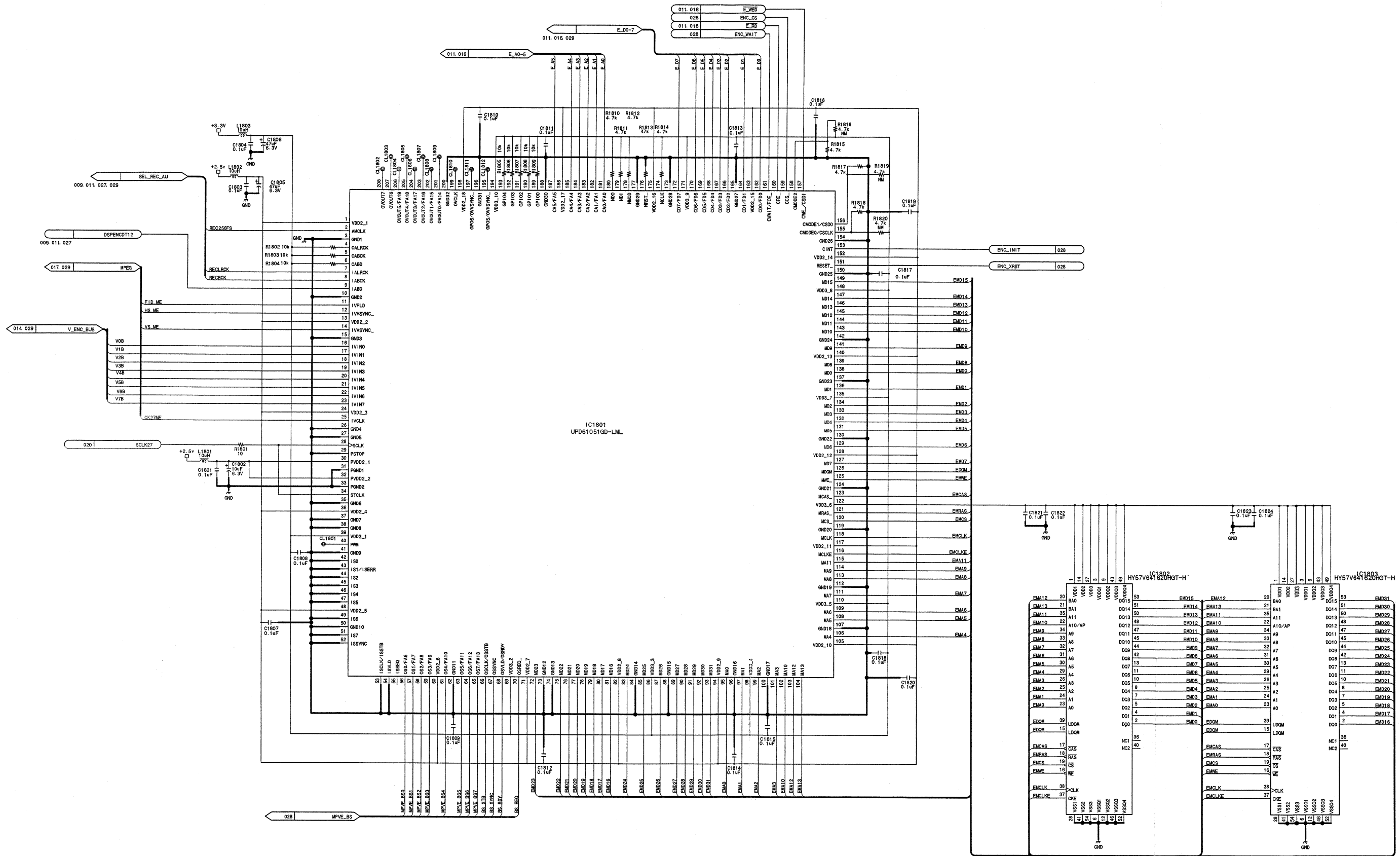
DPR-224 (16/29)
BOARD NO. 1-686-170-12
DSR-DR1000_DPR-224_012_16



DPR-224 (17/29)

BOARD NO. 1-686-170-12
DSR-DR1000_DPR-224_012_17

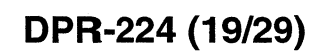
DSR-DR1000/DR1000P



DPR-224 (18/29)

BOARD NO. 1-686-170-12

DSR-DR1000_DPR-224_012_18

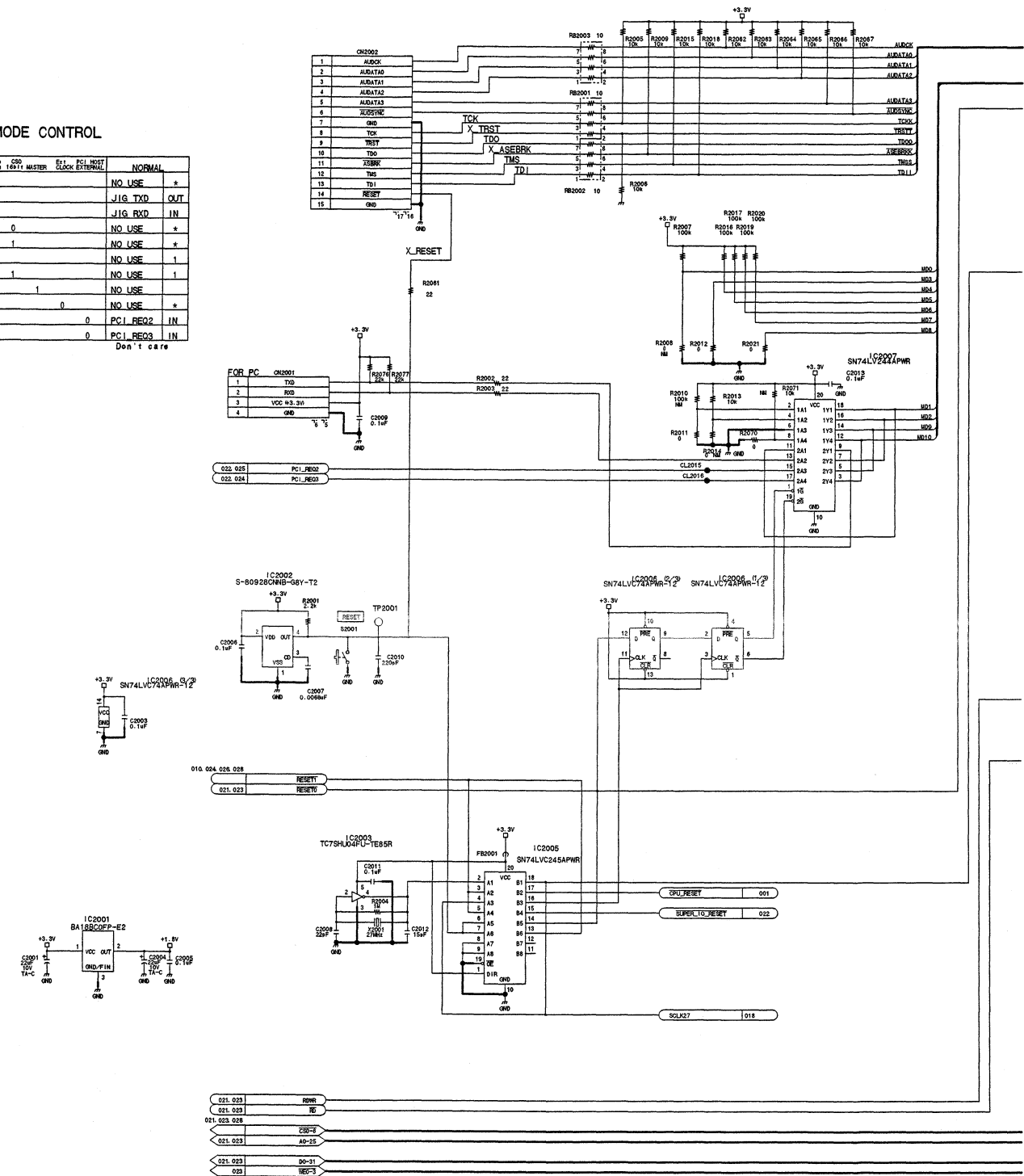


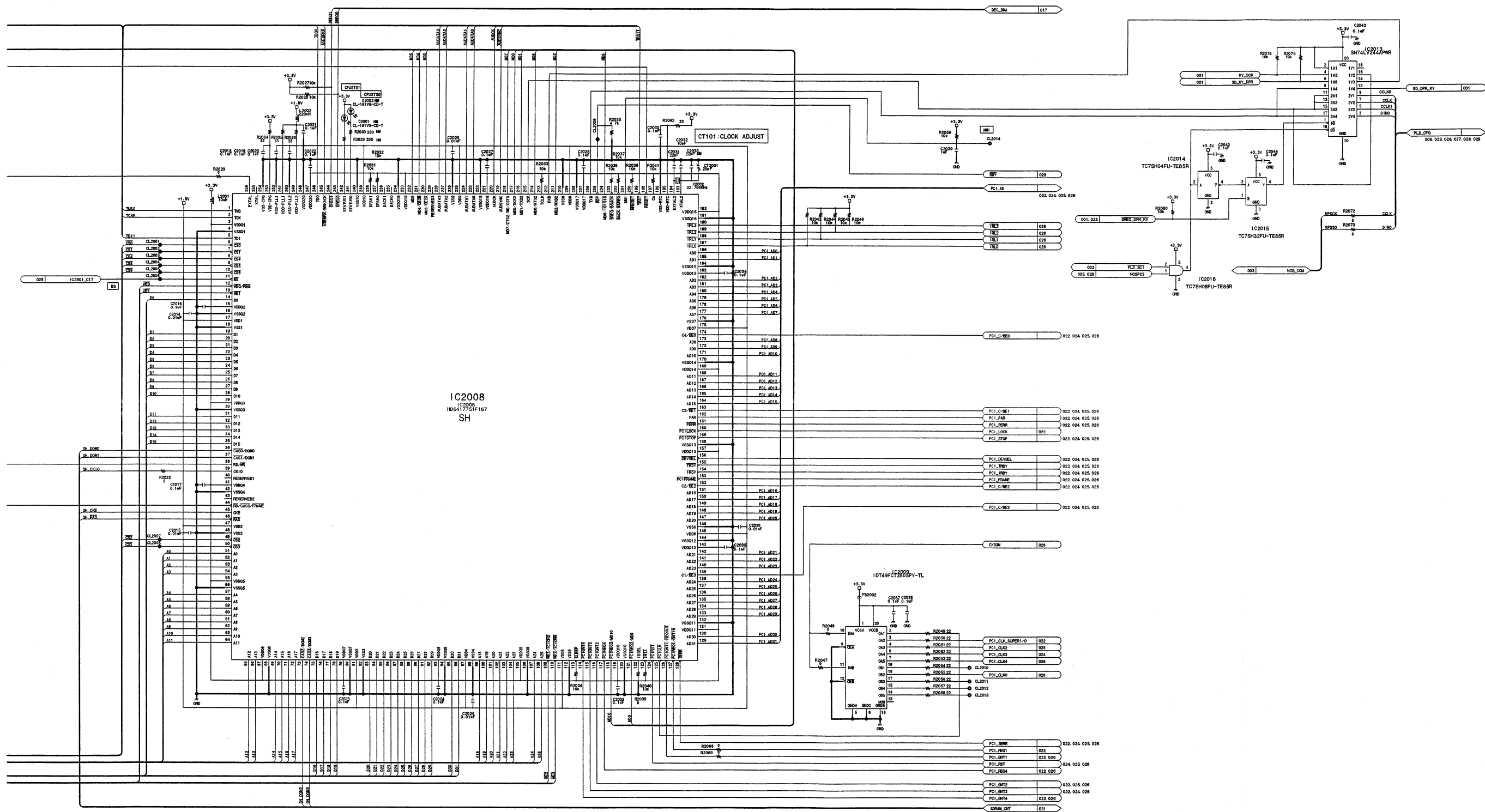
DSR-DR1000_DPR-224_012_19

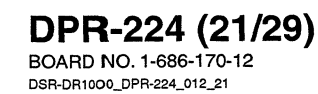
5

MD	CKIO	LS1234 Enable	CS0 16V1V MASTER	SEL BLACK	PCI HOST EXTERNAL	NORMAL
0	1					NO USE
1	0					JIG_TXD
2	1					JIG_RXD
3		0				NO USE
4		1				NO USE
5	1					NO USE
6		1				NO USE
7			1			NO USE
8				0		NO USE
9					0	PCI_REG2
10					0	PCI_REG3

Don't care



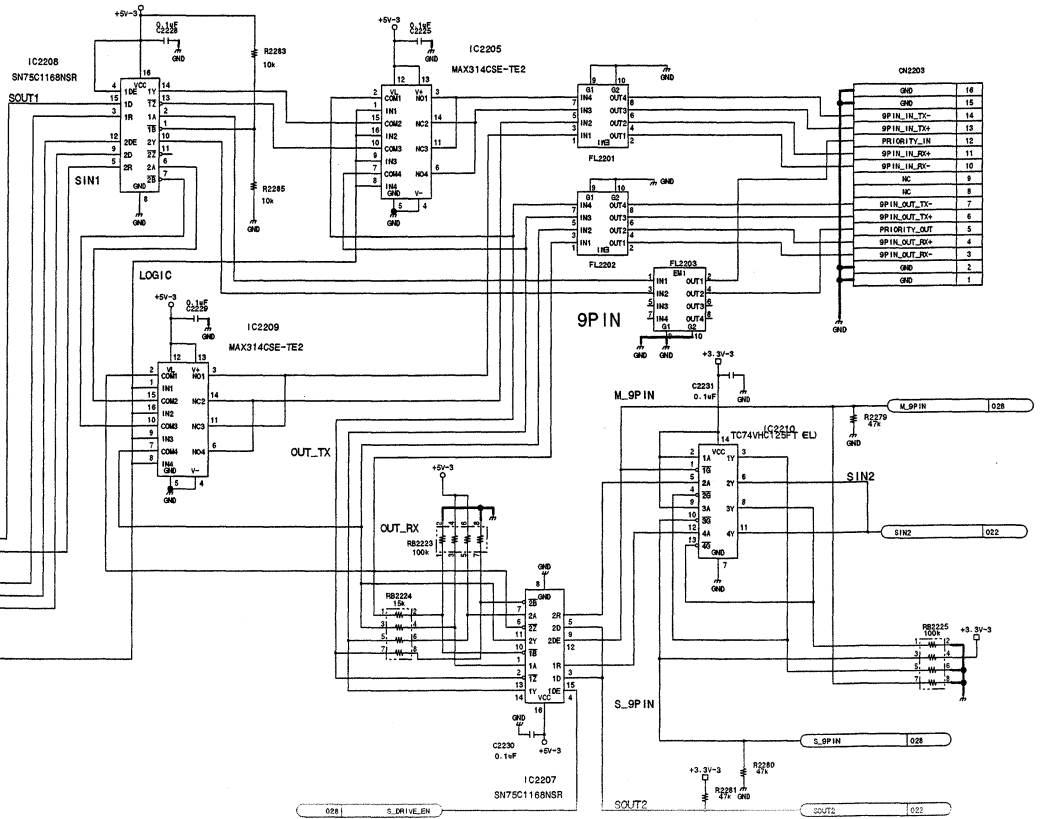
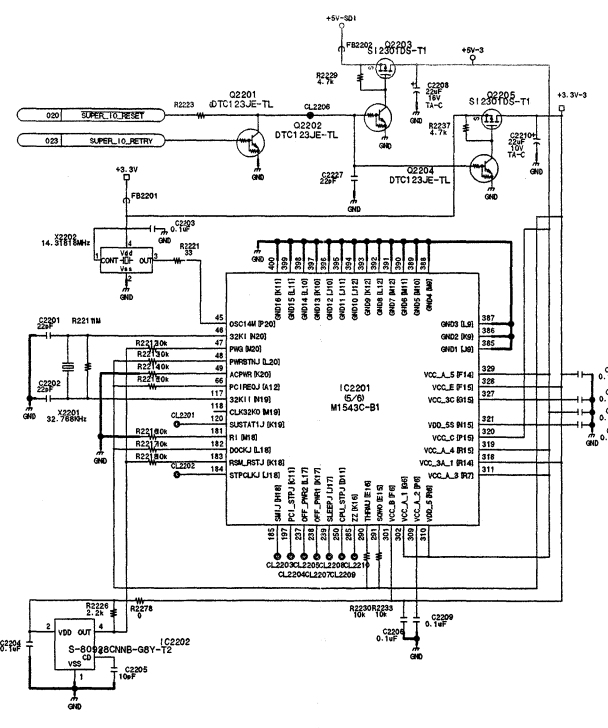
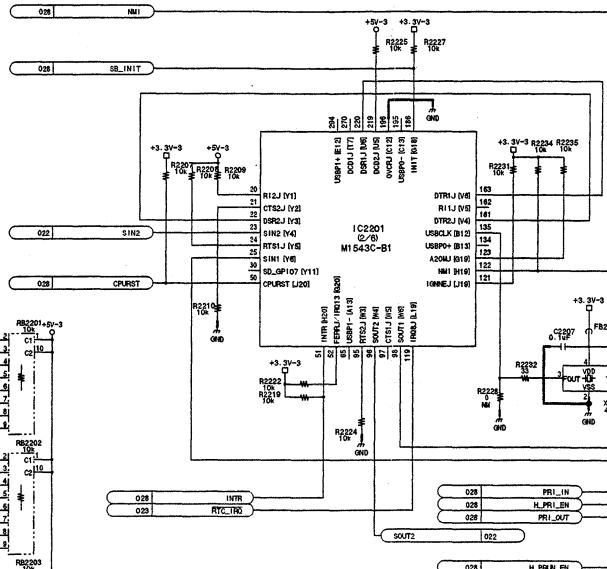
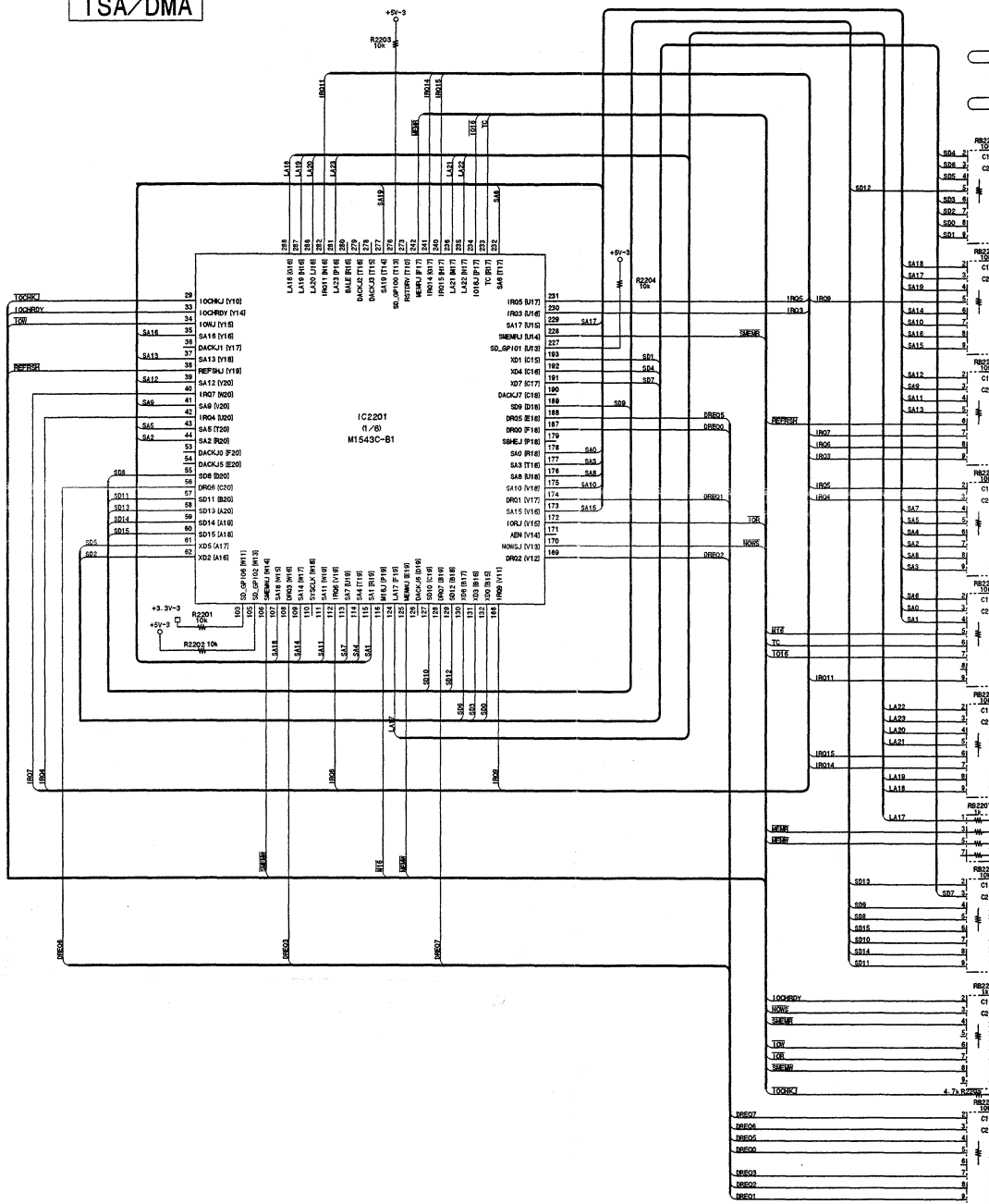




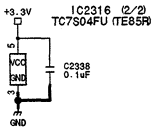
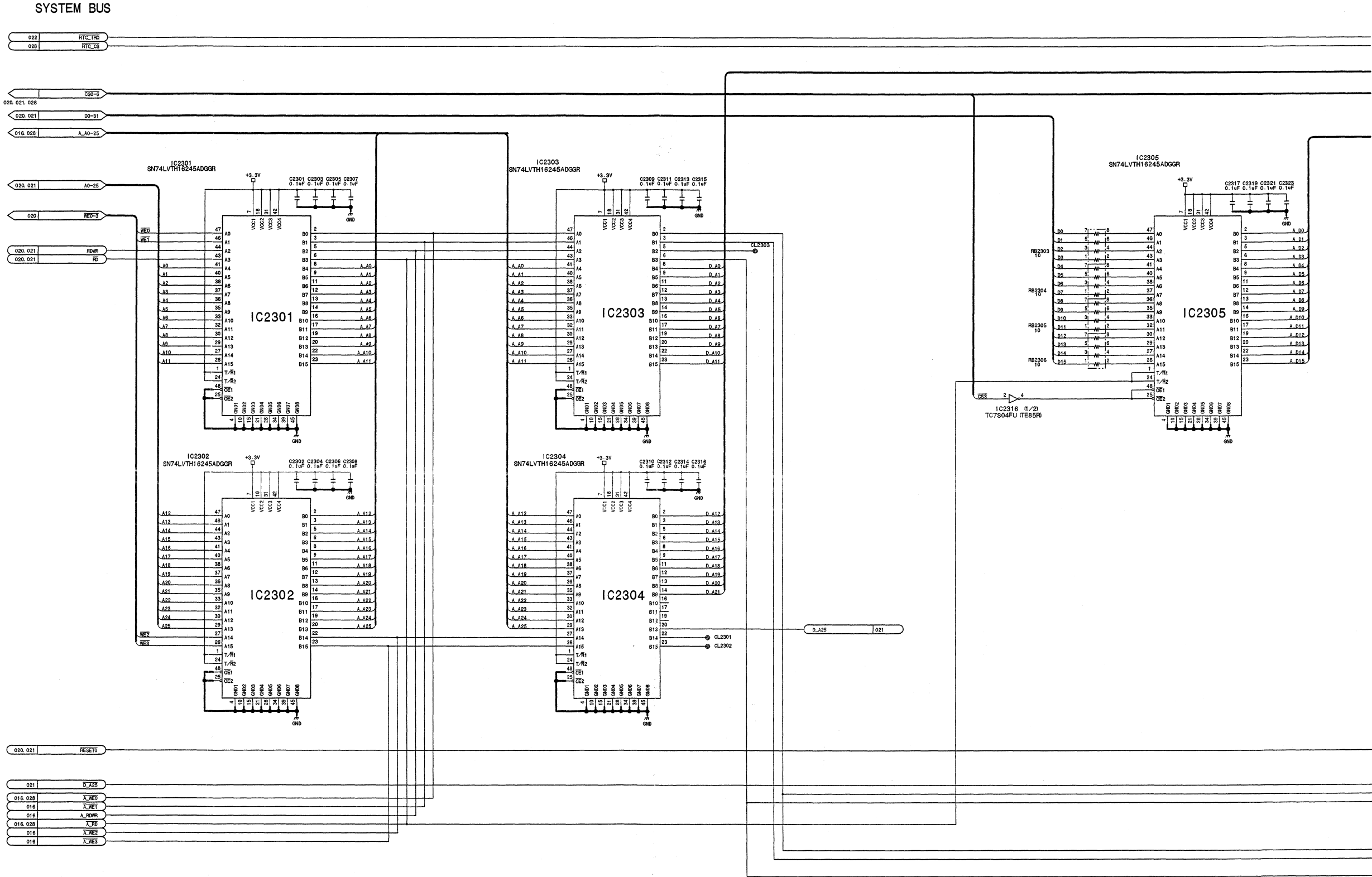
ISA/DMA

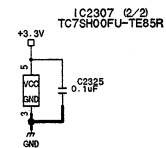
CPU/USB/SERIAL

POWER MANAGER

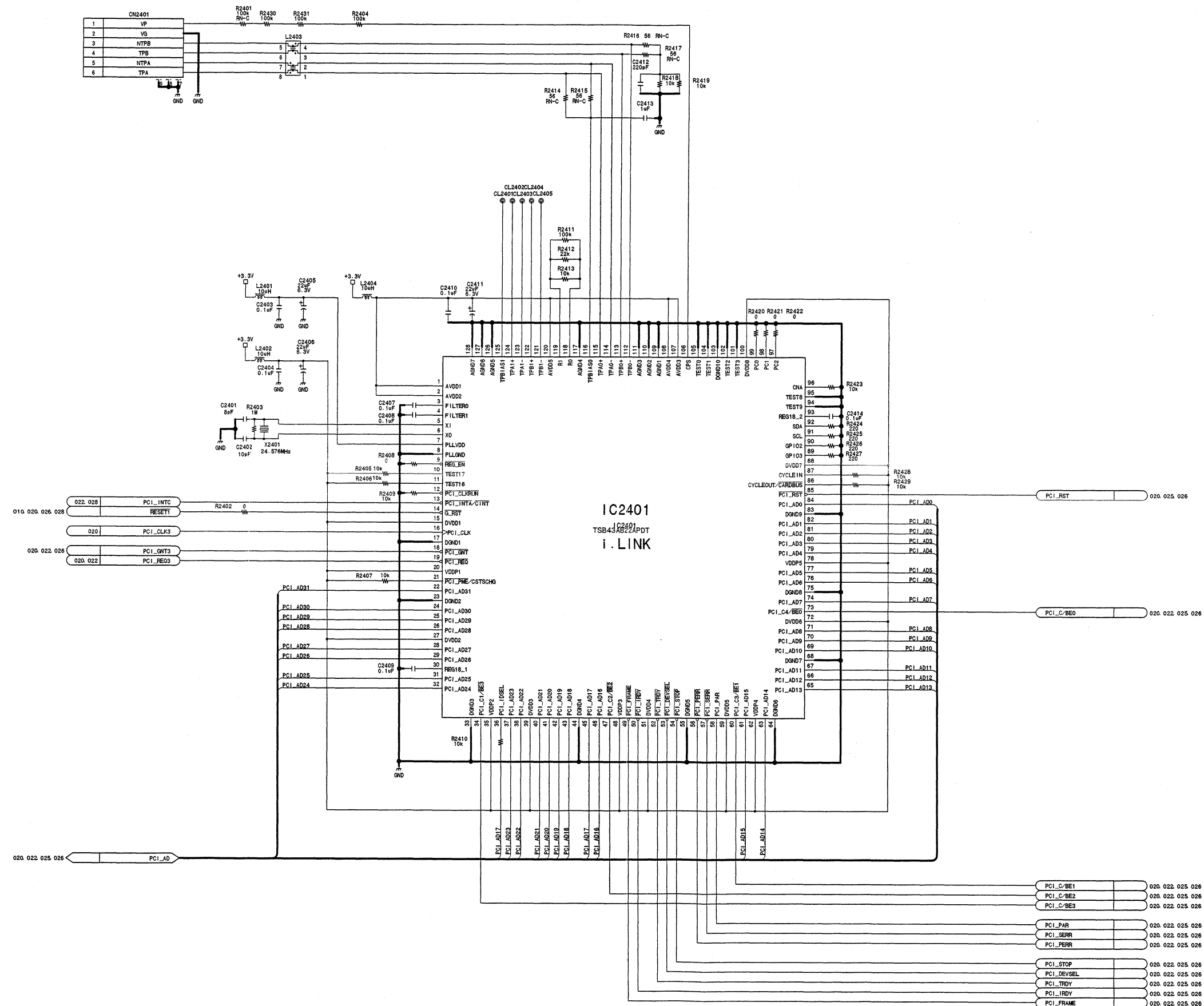


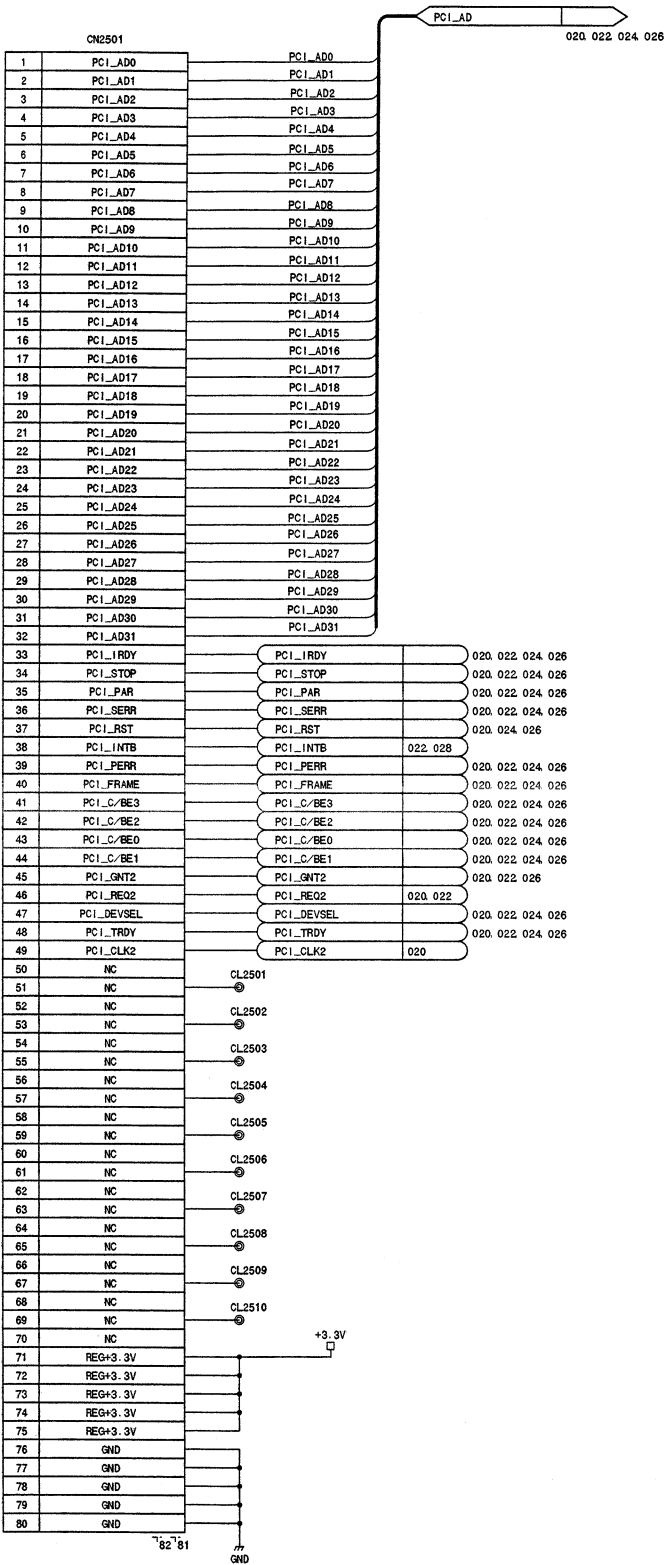






5





1

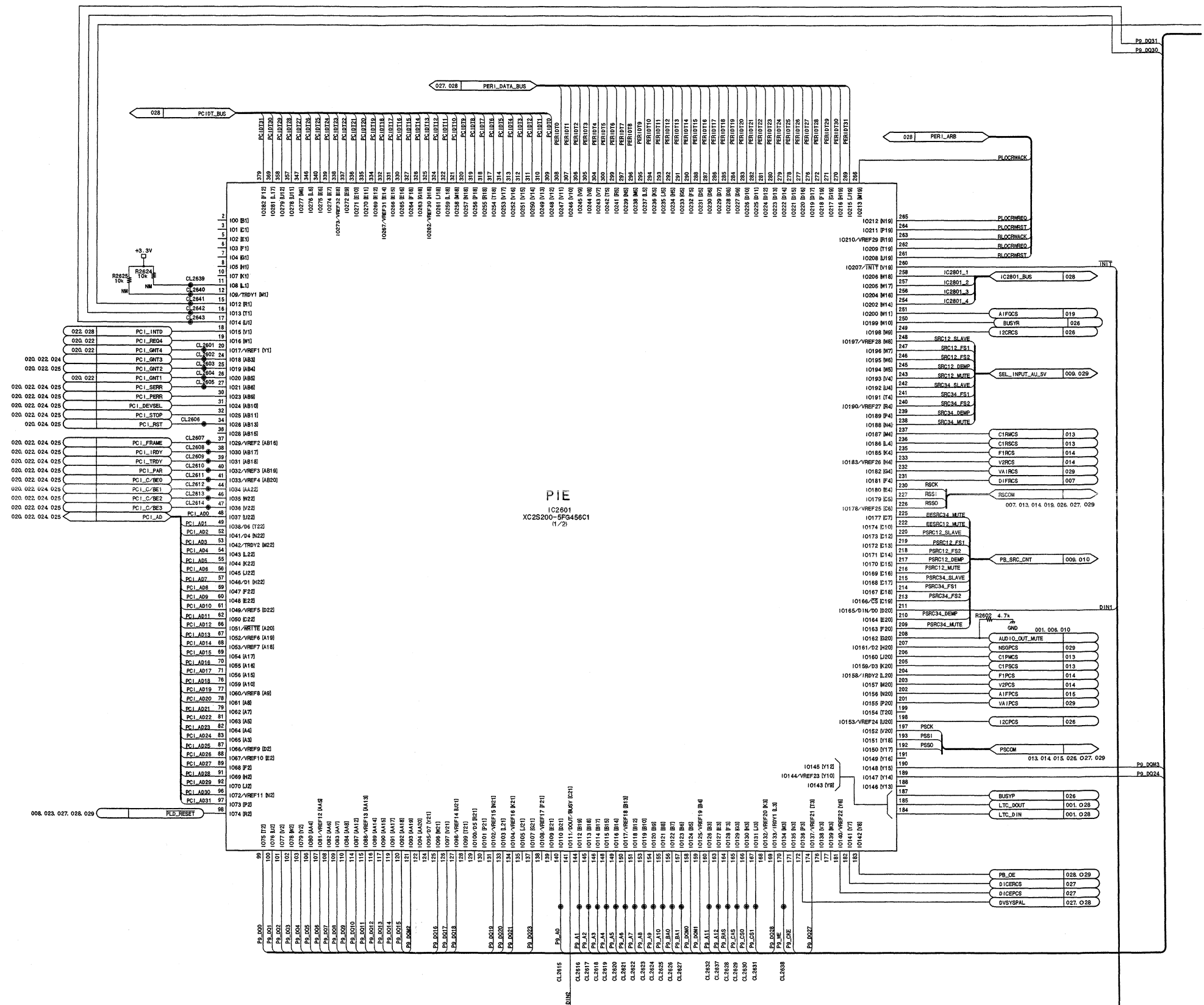
2

3

4

5

DPR-224 (25/29)
BOARD NO. 1-686-170-12
DSR-DR1000_DPR-224_012_25

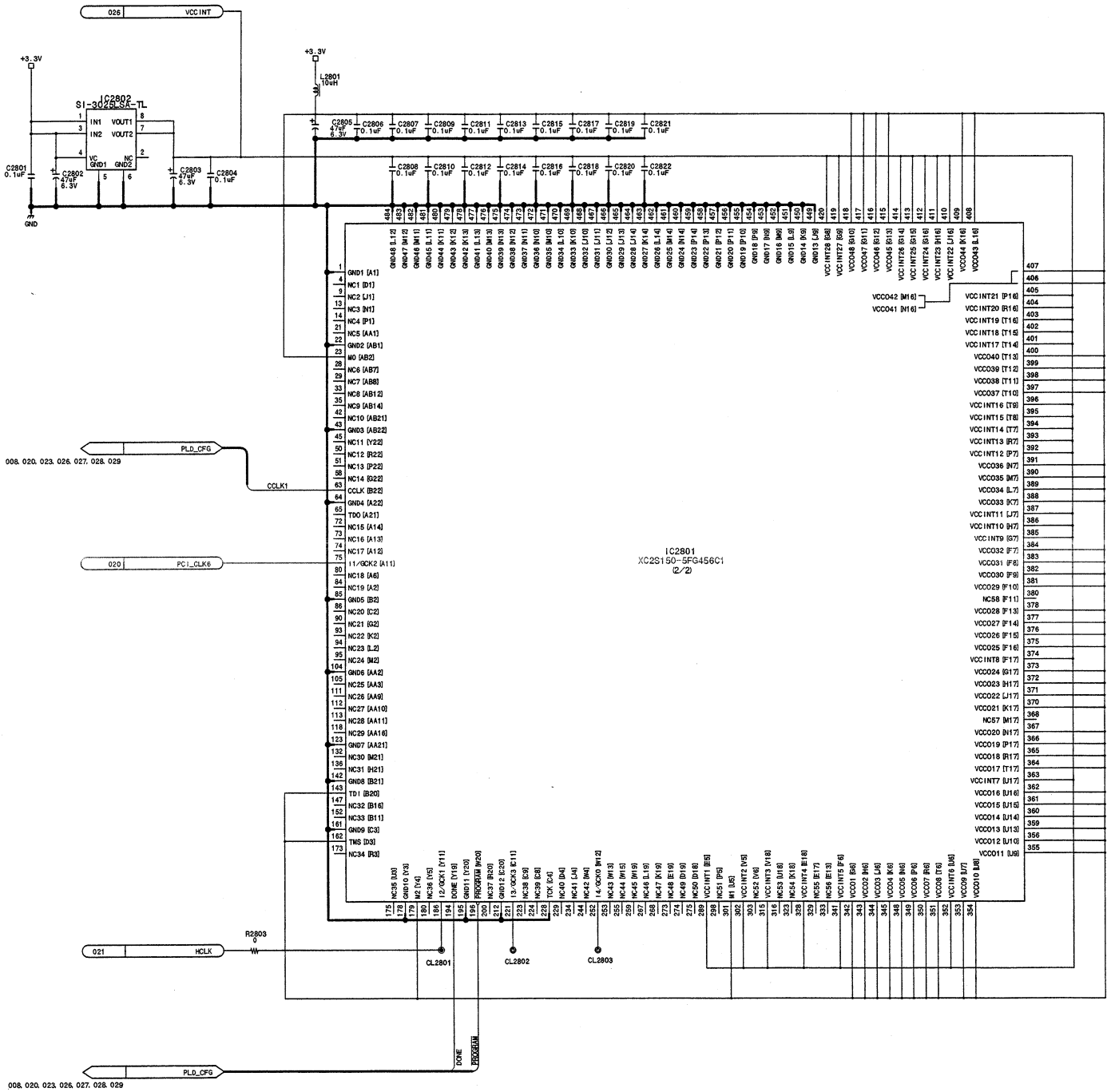




H







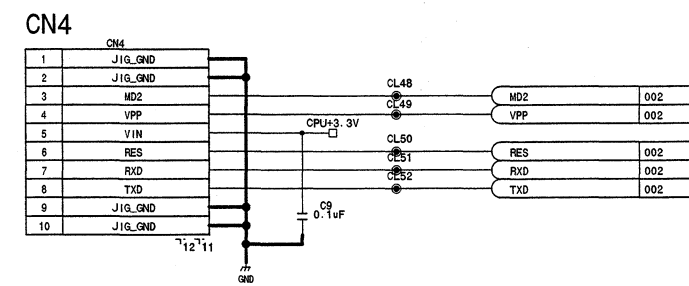
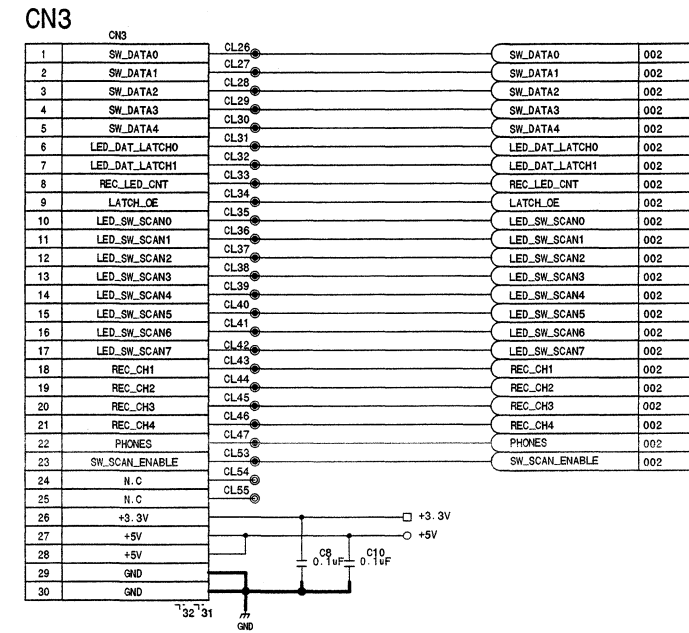
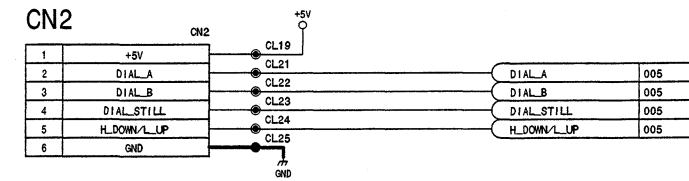
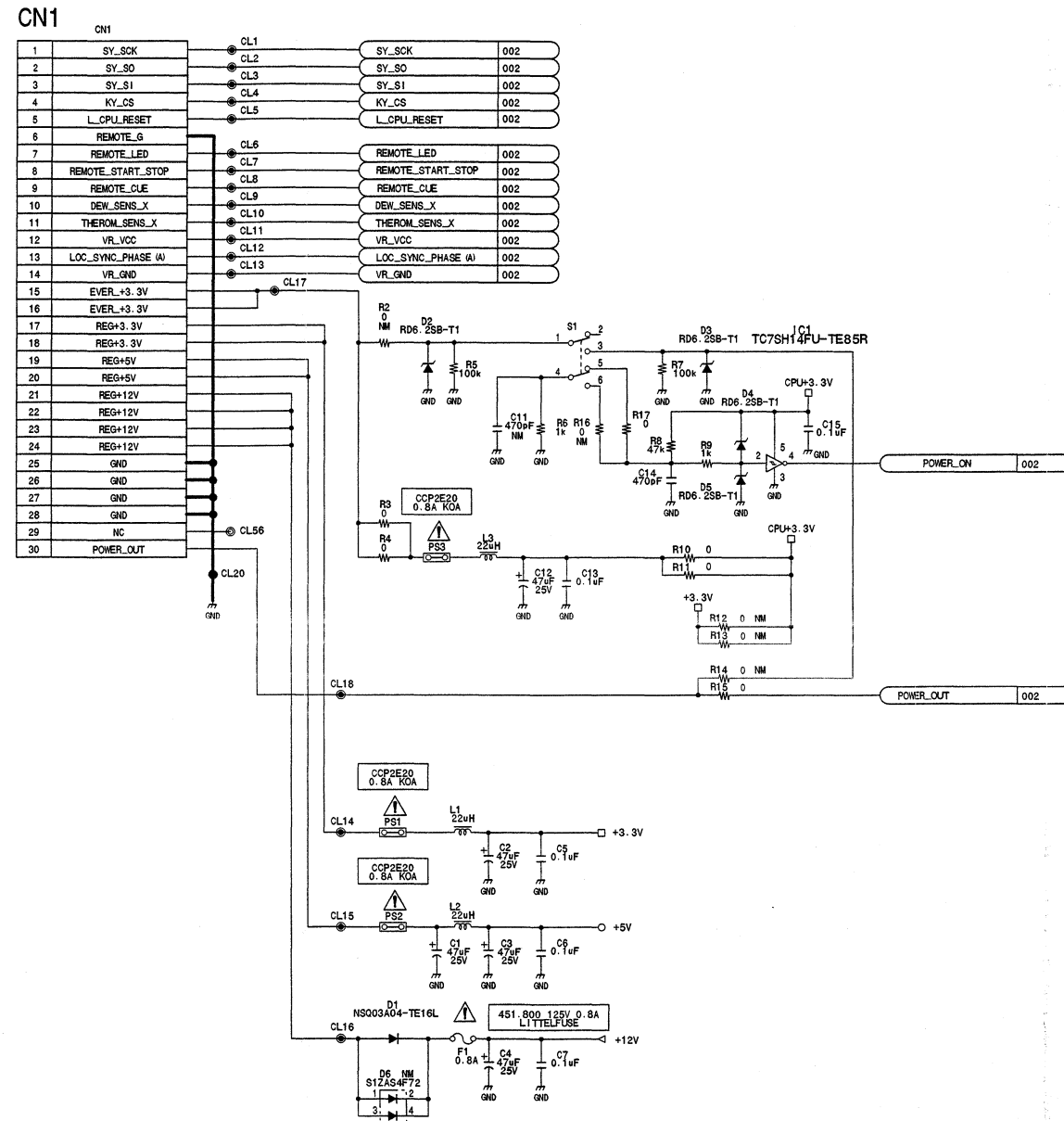
1

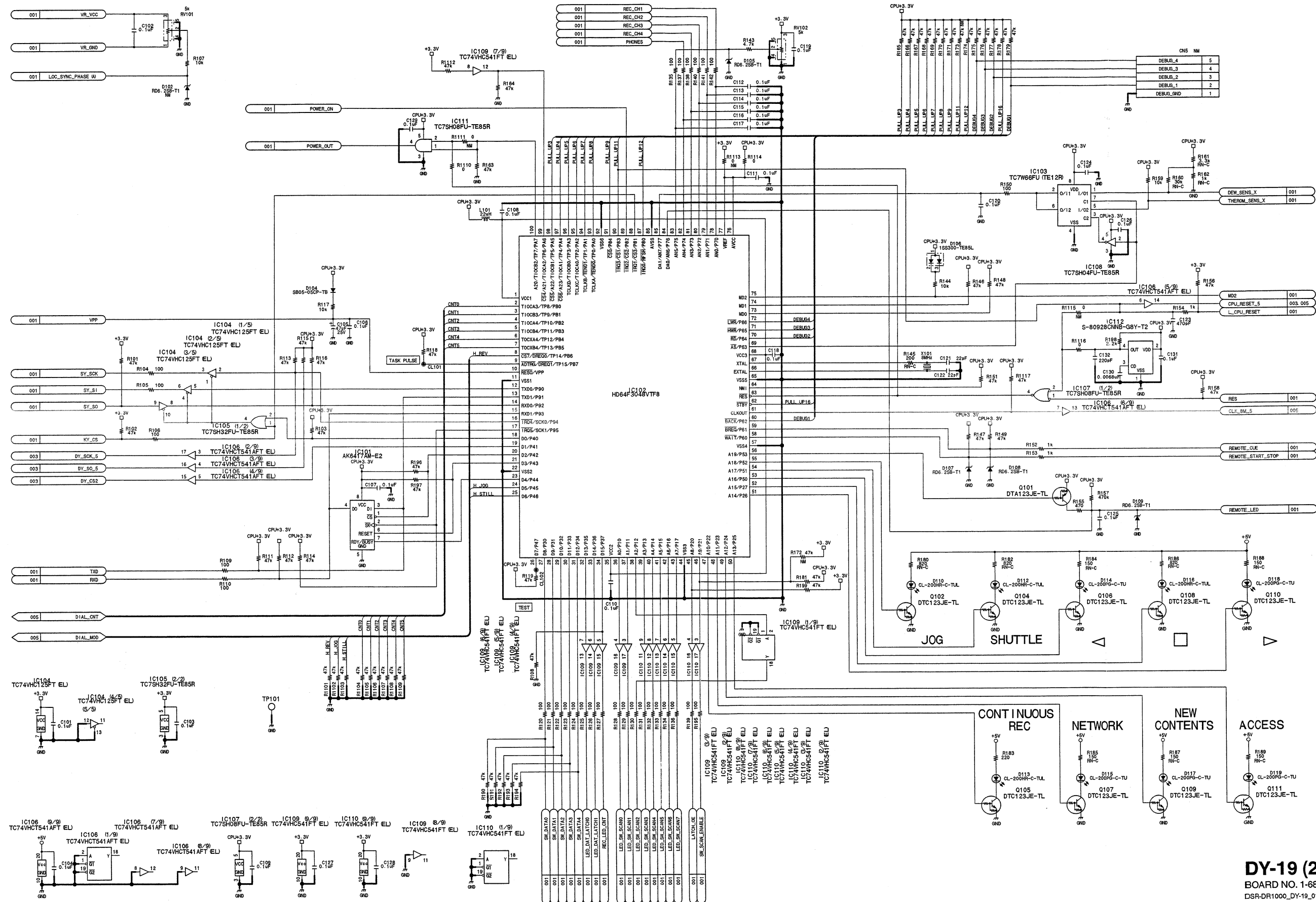
2

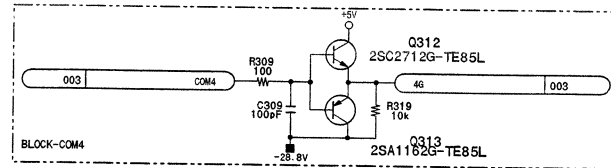
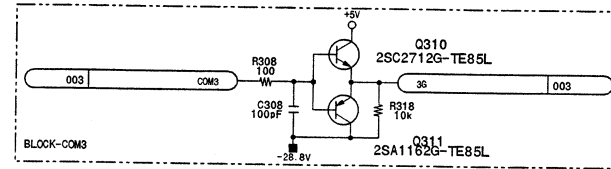
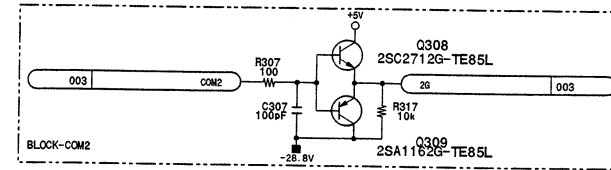
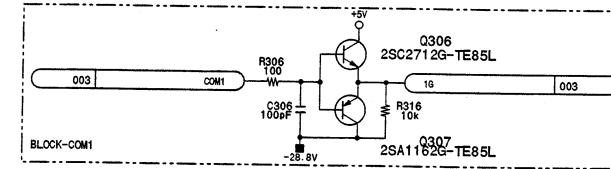
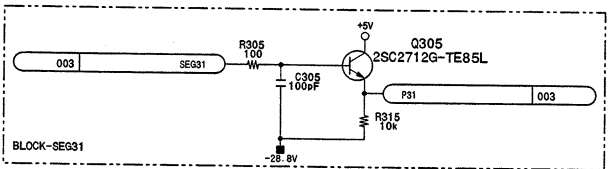
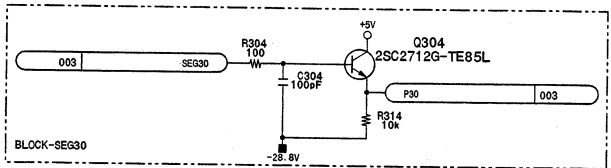
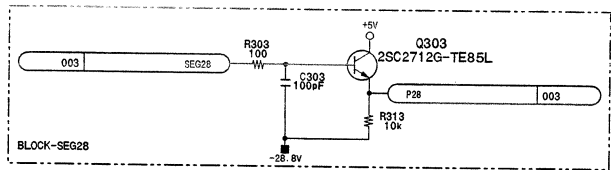
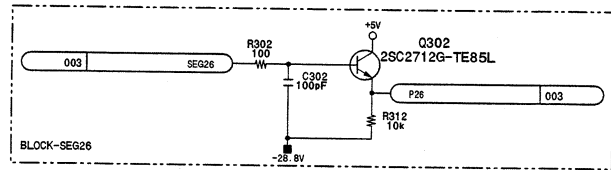
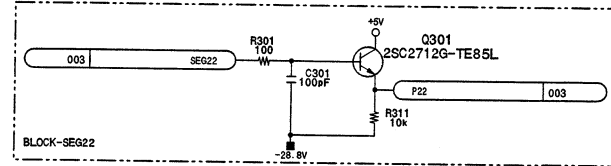
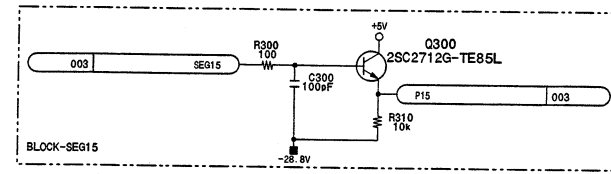
3

4

5







1

2

3

4

5

A

B

C

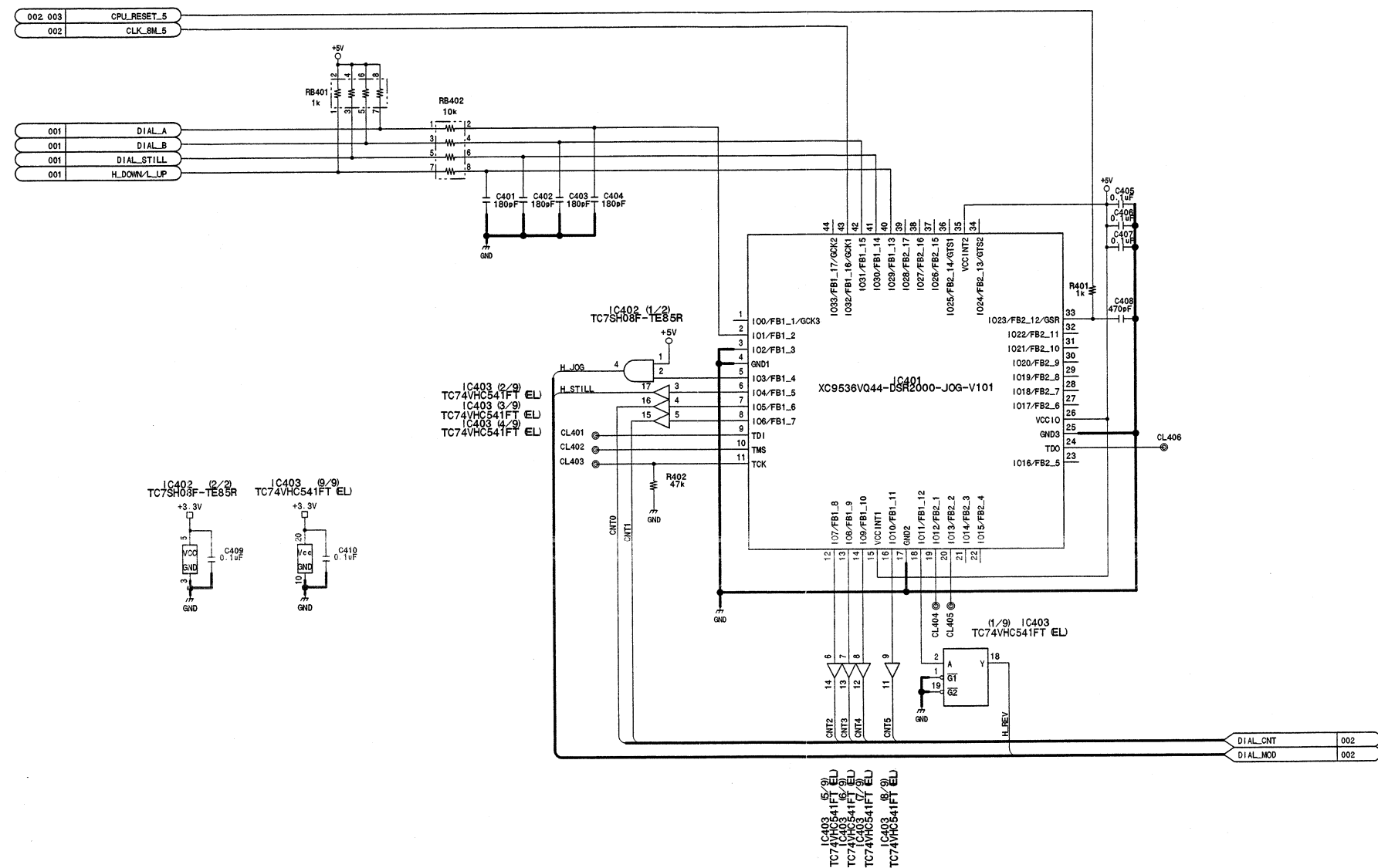
D

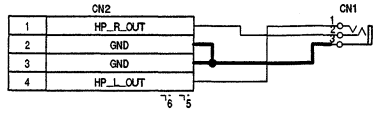
E

F

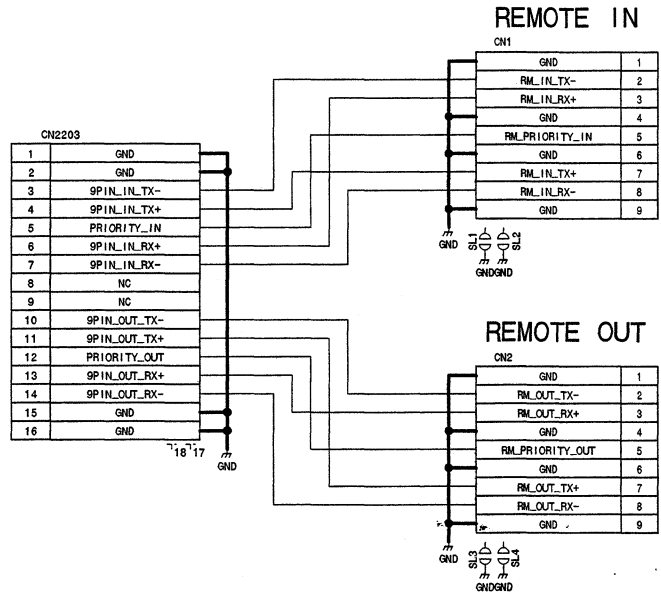
G

H

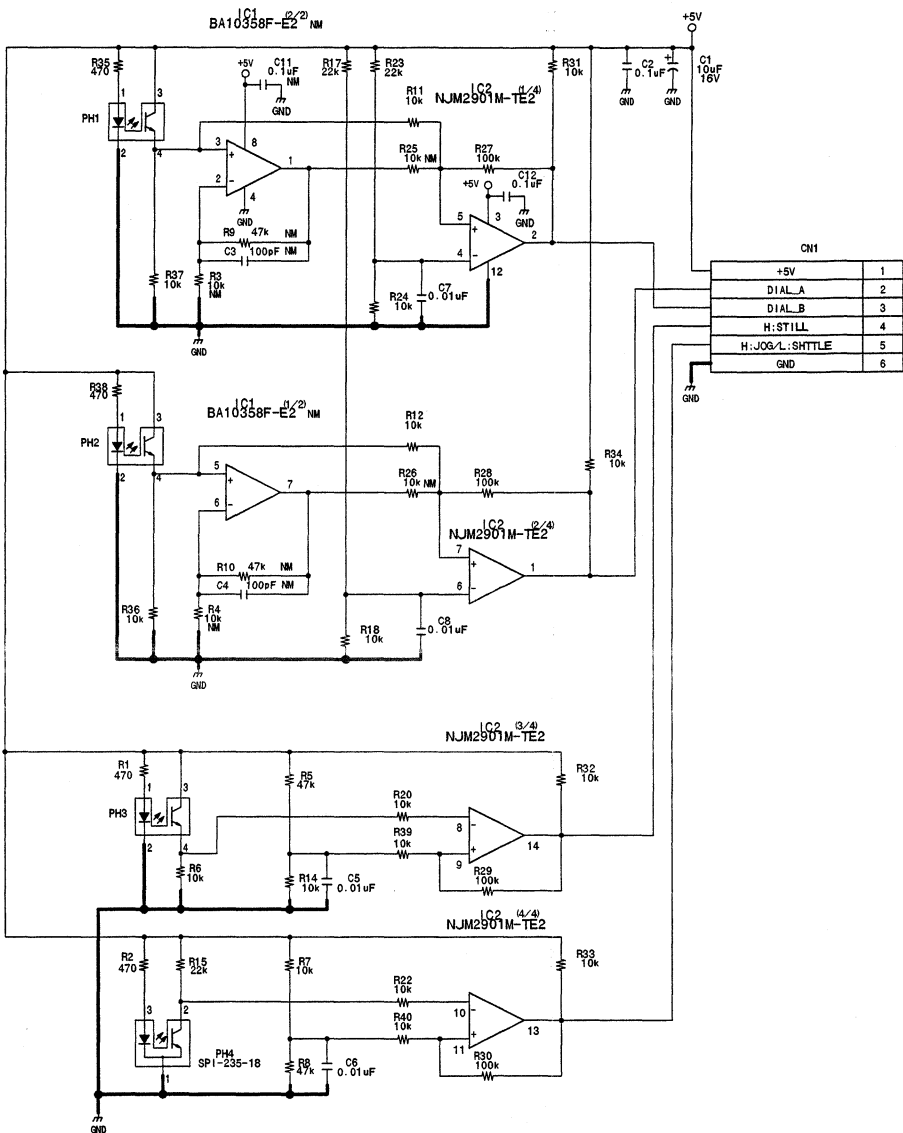




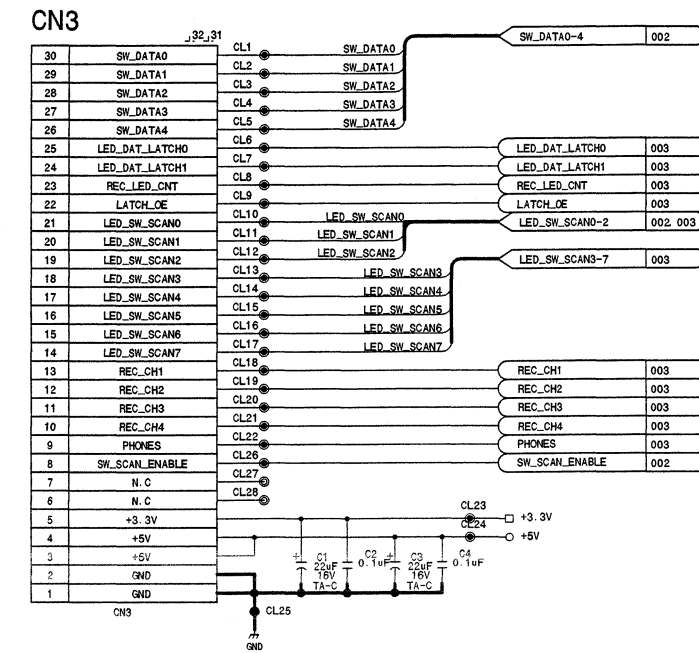
HP-115
BOARD NO. 1-686-173-11
DSR-DR1000_HP-115_011_1

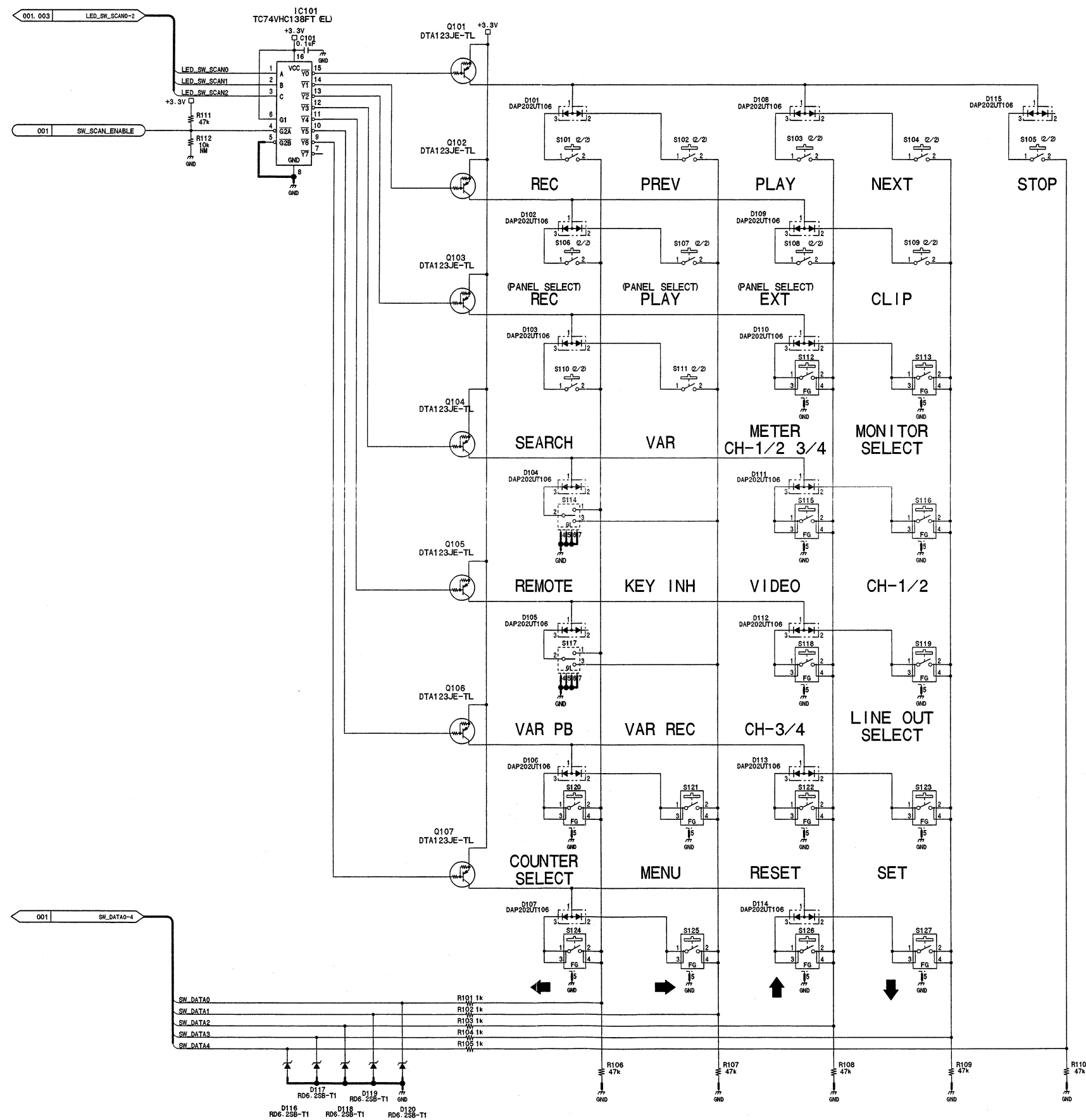


RM-195
BOARD NO. 1-686-174-11
DSR-DR1000_RM-195_011_1

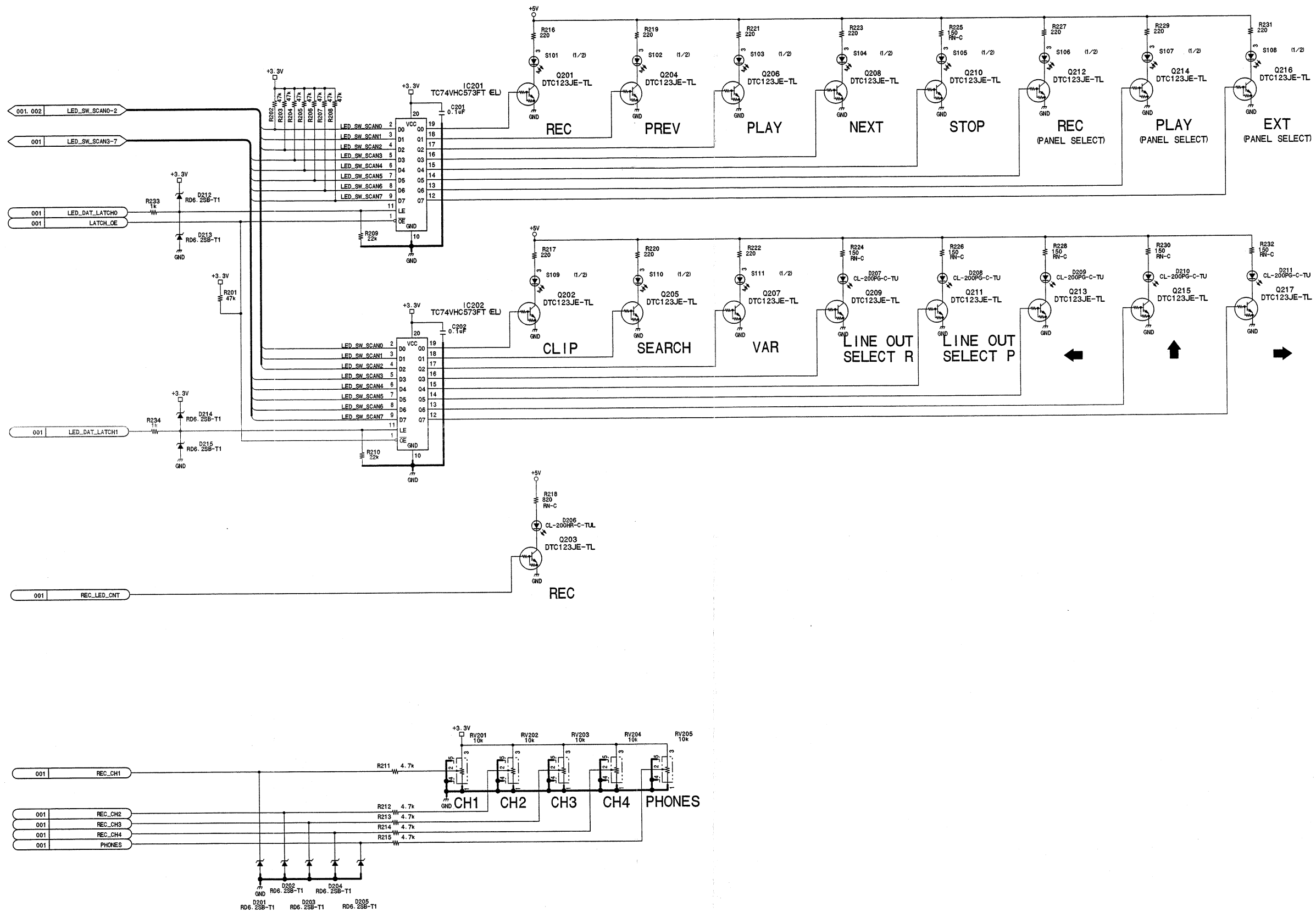


PTC-100
BOARD NO. 1-675-520-13
DSR-2000_PTC-100_013_1





KY-536 (2/3)
BOARD NO. 1-686-172-11
DSR-DR1000_KY-536_011_2

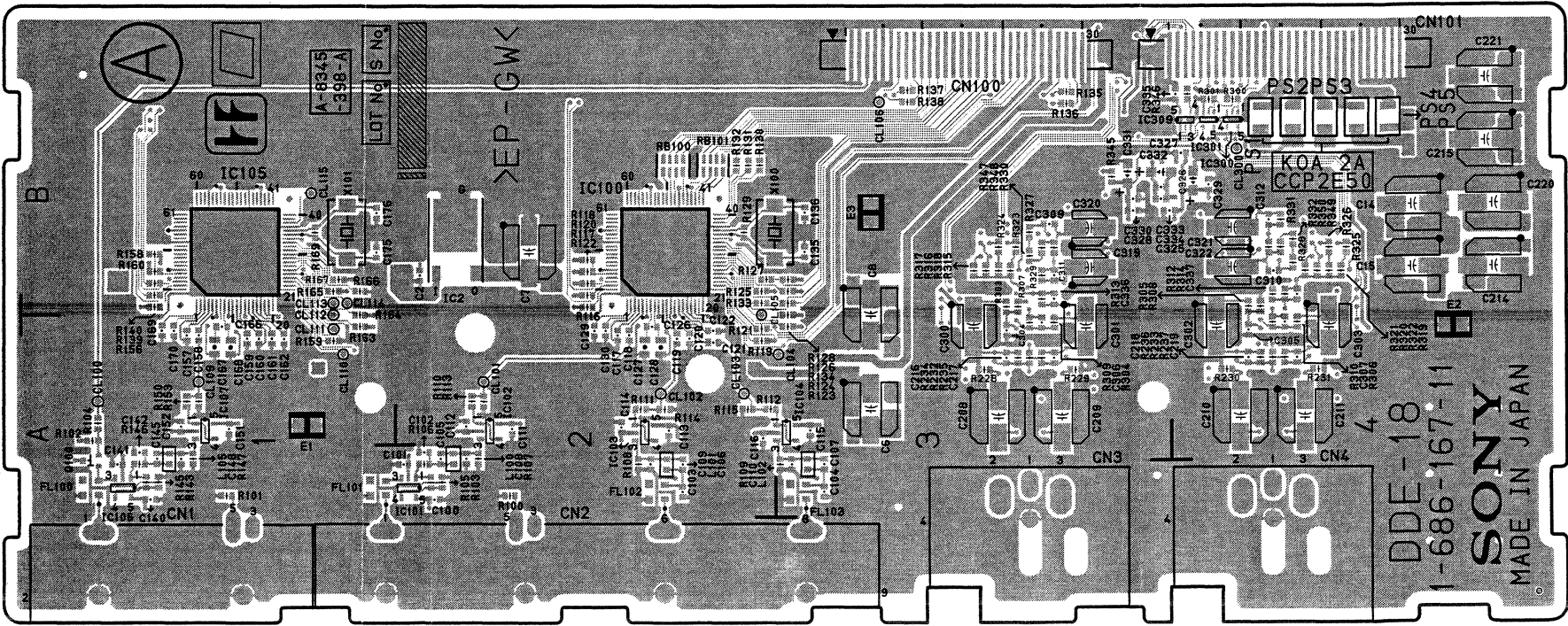


Section 11
Board Layouts

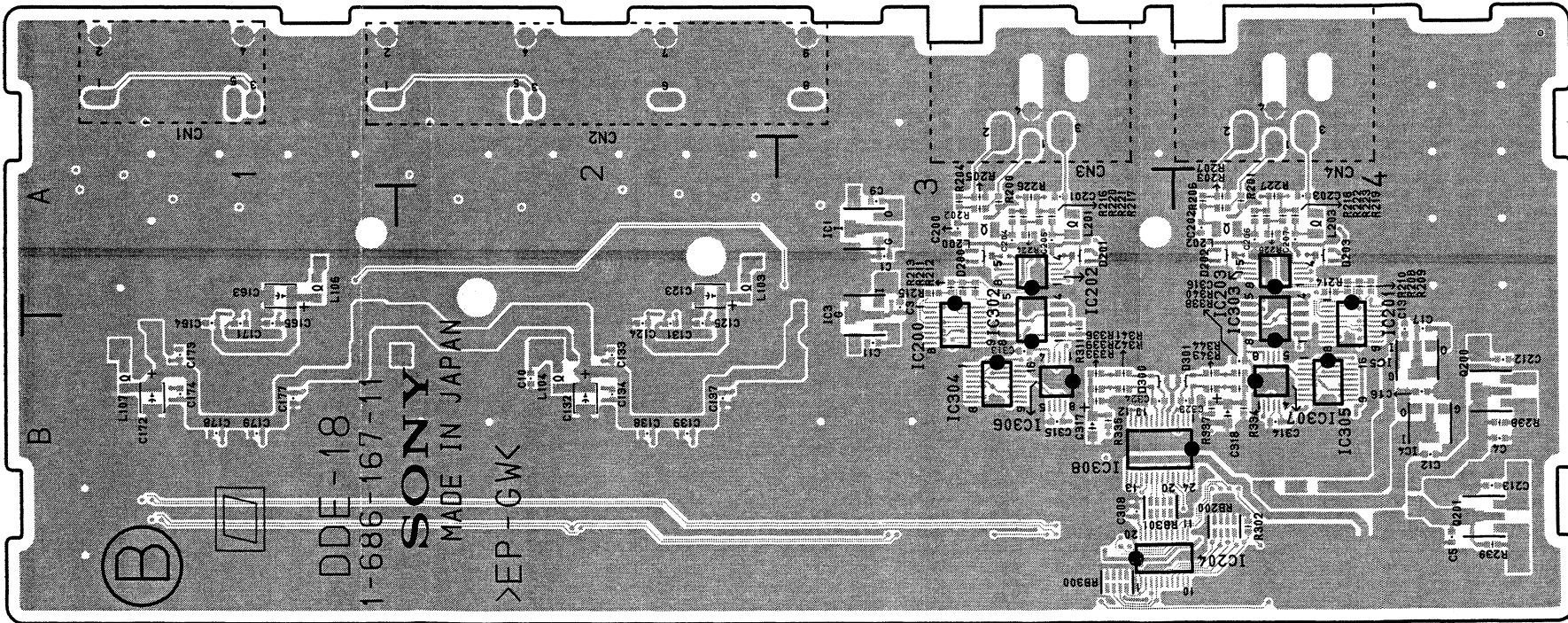
DDE-18 (1-686-167-11)

C1	*A3	C205	*A3	FL102	A2	R137	B3	R332	B4
C2	B2	C206	*A4	FL103	A3	R138	B3	R333	*B3
C3	*A3	C207	*A4			R139	B1	R334	*B4
C4	*B4	C208	A3	IC1	*A3	R140	B1	R335	*B3
C5	*B4	C209	A3	IC2	B2	R143	A1	R336	*B3
C6	A3	C210	A4	IC3	*A3	R145	A1	R337	*B4
C7	B2	C211	A4	IC4	*B4	R146	A1	R338	*B4
C8	A3	C212	*B4	IC5	*B4	R147	A1	R339	*B3
C9	*A3	C213	*B4	IC100	B2	R150	A1	R340	*B4
C10	*B2	C214	B4	IC101	A2	R153	A1	R341	*B3
C11	*B3	C215	B4	IC102	A2	R156	B1	R342	*B3
C12	*B4	C216	A3	IC103	A2	R158	B1	R343	*B4
C13	*B4	C217	A3	IC104	A3	R159	A1	R344	*B4
C14	B4	C218	A4	IC105	B1	R160	B1	R345	B3
C15	B4	C219	A4	IC106	A1	R163	A1	R346	B4
C16	*B4	C220	B4	IC107	A1	R164	A1	R347	B3
C17	*B4	C221	B4	IC200	*A3	R165	B1	R348	B3
C100	A2	C300	A3	IC201	*A4	R166	B1	R349	B4
C101	A2	C301	A3	IC202	*A3	R167	B1	R350	B4
C102	A2	C302	A4	IC203	*A4	R169	B1		
C103	A2	C303	A4	IC204	*B3	R200	*A3	RB100	B2
C104	A3	C304	A3	IC300	B4	R201	*A4	RB101	B2
C105	A2	C305	A4	IC301	B4	R202	*A3	RB200	*B4
C106	A2	C306	A3	IC302	*B3	R203	*A4	RB300	*B3
C107	A3	C307	A4	IC303	*B4	R204	*A3	RB301	*B3
C108	A2	C308	*B3	IC304	*B3	R205	*A3		
C109	A2	C309	B3	IC305	*B4	R206	*A4	X100	B2
C110	A3	C310	B4	IC306	*B3	R207	*A4	X101	B1
C111	A2	C311	B3	IC307	*B4	R208	*A4		
C112	A2	C312	B4	IC308	*B4	R209	*A4		
C113	A2	C313	*B3	IC309	B4	R210	*A4		
C114	A2	C314	*B4			R211	*A3		
C115	A3	C315	*B3	L100	A2	R212	*A3		
C116	A2	C316	*B4	L101	A2	R213	*A3		
C117	A2	C317	*B3	L102	A3	R214	*A4		
C118	A2	C318	*B4	L103	*A2	R215	*A3		
C119	A2	C319	B3	L104	*B2	R216	*A3		
C120	A2	C320	B3	L105	A1	R217	*A3		
C121	A2	C321	B4	L106	*A1	R218	*A4		
C122	A2	C322	B4	L107	*B1	R219	*A4		
C123	*A2	C323	*B4	L200	*A3	R220	*A3		
C124	*B2	C324	*B3	L201	*A3	R221	*A3		
C125	*B2	C325	B3	L202	*A4	R222	*A4		
C126	A2	C326	B4	L203	*A4	R223	*A4		
C127	A2	C327	B4			R224	*A3		
C128	A2	C328	B3	PS1	B4	R225	*A4		
C129	A2	C329	B4	PS2	B4	R226	*A3		
C130	A2	C330	B3	PS3	B4	R227	*A4		
C131	*B2	C331	B3	PS4	B4	R228	A3		
C132	*B2	C332	B3	PS5	B4	R229	A3		
C133	*B2	C333	B3			R230	A4		
C134	*B2	C334	B3	Q100	A1	R231	A4		
C135	B3	C335	B4	Q200	*B4	R232	A3		
C136	B3	C336	B3	Q201	*B4	R233	A4		
C137	*B2	C337	B4			R234	A3		
C138	*B2			R100	A2	R235	A3		
C139	*B2	CL100	A1	R101	A1	R236	A4		
C140	A1	CL101	A2	R102	A1	R237	A4		
C141	A1	CL102	A2	R103	A2	R238	*B4		
C142	A1	CL103	A2	R104	A1	R239	*B4		
C145	A1	CL104	A3	R105	A2	R300	B4		
C148	A1	CL105	A2	R106	A2	R301	B4		
C151	A1	CL106	B3	R107	A2	R302	*B4		
C152	A1	CL109	A1	R108	A2	R303	B3		
C157	A1	CL110	A1	R109	A3	R304	A3		
C158	A1	CL111	A1	R110	A2	R305	B4		
C159	A1	CL112	A1	R111	A2	R306	A4		
C160	A1	CL113	B1	R112	A2	R307	B3		
C161	A1	CL114	B1	R113	A2	R308	B4		
C162	A1	CL115	B1	R114	A2	R309	A3		
C163	*A1	CL300	B4	R115	A2	R310	A4		
C164	*B1			R116	B2	R311	*B3		
C165	*B1	CN1	A1	R117	B2	R312	B4		
C166	A1	CN2	A2	R118	B2	R313	B3		
C167	A1	CN3	A3	R119	A2	R314	B4		
C168	A1	CN4	A4	R120	B2	R315	B3		
C169	A1	CN100	B3	R121	A2	R316	B3		
C170	A1	CN101	B4	R122	B2	R317	B3		
C171	*B1			R123	A3	R318	B3		
C172	*B1	D200	*A3	R124	A3	R319	B4		
C173	*B1	D201	*A3	R125	B2	R320	B4		
C174	*B1	D202	*A4	R126	B3	R321	B4		
C175	B1	D203	*A4	R127	B2	R322	B4		
C176	B1	D300	*B3	R128	B3	R323	B3		
C177	*B1	D301	*B4	R129	B2	R324	B3		
C178	*B1			R130	B2	R325	B4		
C179	*B1	E1	A1	R131	B2	R326	B4		
C200	*A3	E2	A4	R132	B2	R327	B3		
C201	*A3	E3	B3	R133	B2	R328	B4		
C202	*A4			R134	B3	R329	B3		
C203	*A4	FL100	A1	R135	B3	R330	B3		
C204	*A3	FL101	A1	R136	B3	R331	B4		

*:B SIDE



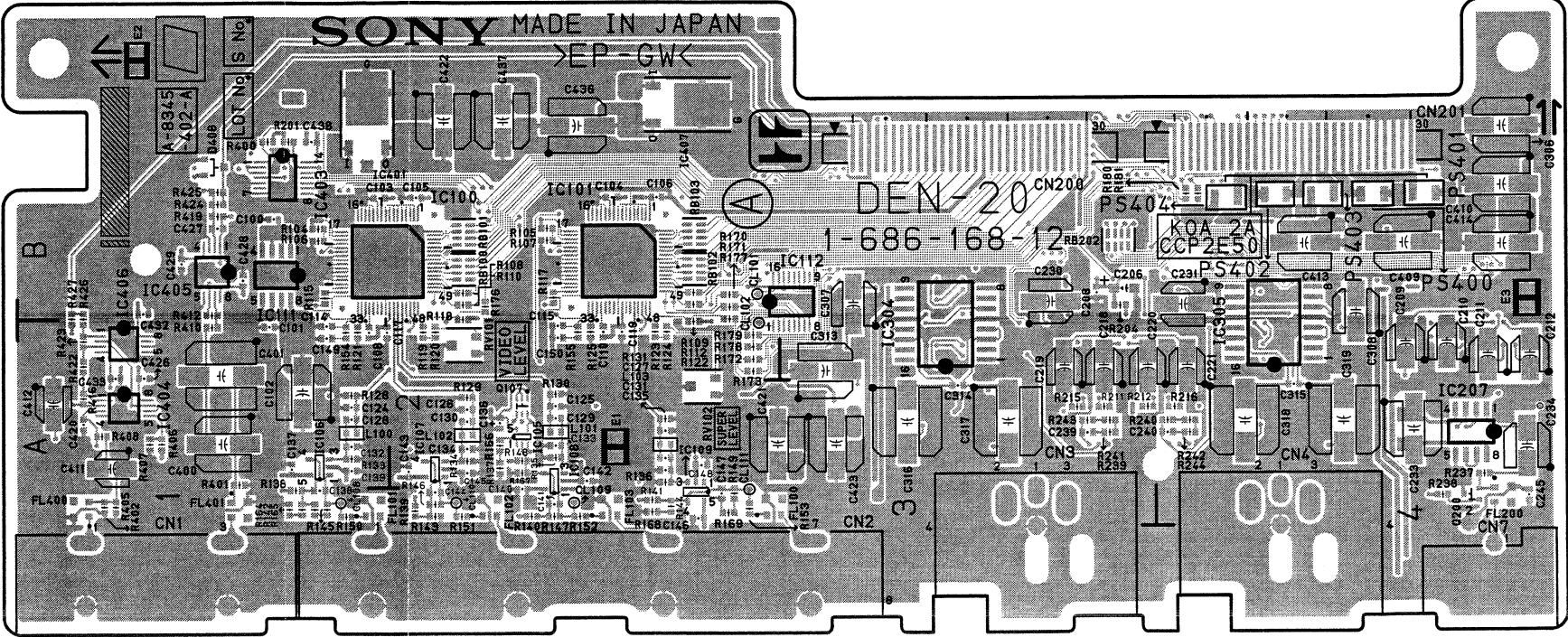
DDE-18 -A SIDE-
SUFFIX: -11



DDE-18 -B SIDE-
SUFFIX: -11

DEN-20 (1-686-168-12)

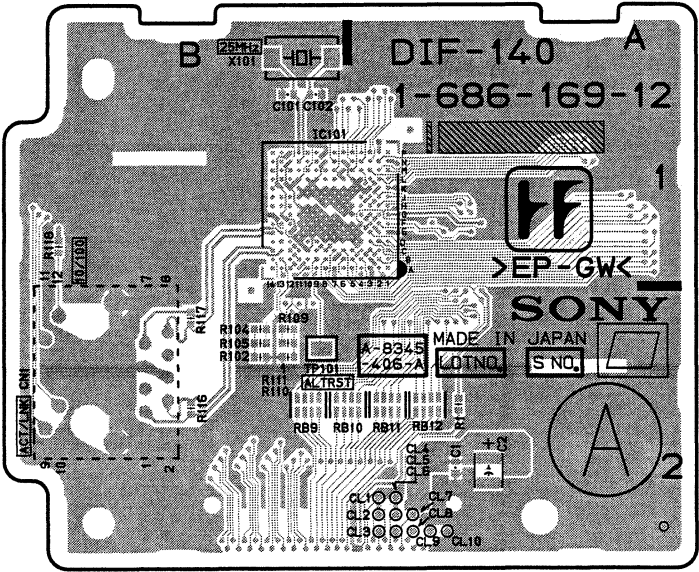
C100	B1	C239	A3	D404	*A1	R103	*B1	R216	A4	R417	*B1
C101	A1	C240	A4	D405	*A1	R104	B1	R217	*A3	R418	*B1
C102	A1	C241	*A3	D406	B1	R105	B2	R218	*A3	R419	B1
C103	B1	C242	*A3			R106	B1	R219	*A3	R420	*B1
C104	B2	C243	*A4	E1	A2	R107	B2	R220	*A4	R421	*B1
C105	B2	C244	*A3	E2	B1	R108	B2	R221	*A4	R422	A1
C106	B2	C245	A4	E3	B4	R109	B2	R222	*A4	R423	A1
C107	*A2	C300	*B3			R110	B2	R223	*A4	R424	B1
C108	A1	C301	*B4	FL100	A2	R111	*B1	R224	*A4	R425	B1
C109	*A2	C302	*B3	FL101	A1	R112	B2	R225	*A3	R426	B1
C110	A2	C303	*B4	FL102	A2	R113	*B2	R226	*A3	R427	B1
C111	*B1	C304	*B3	FL103	A2	R114	*B2	R227	*A3		
C112	*A1	C305	*B4	FL200	A4	R115	B1	R228	*A3	RB100	B2
C113	*A2	C306	B4	FL300	*A3	R117	B2	R229	*A4	RB101	B2
C114	A1	C307	B3	FL301	*A3	R118	A2	R230	*B4	RB102	B2
C115	A2	C308	B4	FL302	*A4	R119	A2	R231	*A4	RB103	B2
C116	*A2	C309	*A3	FL303	*A4	R120	A2	R232	*B4	RB200	*B3
C117	A1	C310	*A4	FL400	A1	R121	A1	R233	*A3	RB201	*B4
C118	*A2	C311	*A3	FL401	A1	R122	A2	R234	*A3	RB202	B3
C119	A2	C312	*A4			R123	A2	R235	*A4	RB203	*B3
C120	*A2	C313	A3	IC100	B1	R124	A2	R236	*B4	RV101	A2
C121	*A1	C314	A3	IC101	B2	R125	A2	R237	A4	RV102	A2
C122	*A2	C315	A4	IC102	*A1	R126	*A2	R238	A4		
C123	*A2	C316	A3	IC103	*A2	R127	*A2	R239	A3		
C124	A1	C317	A3	IC105	A2	R128	A1	R240	A4		
C125	A2	C318	A4	IC106	A1	R129	A2	R241	A3		
C126	A2	C319	A4	IC107	A2	R130	A2	R242	A4		
C127	A2	C400	A1	IC108	A2	R131	A2	R243	A3		
C128	A1	C401	A1	IC109	A2	R132	*A2	R244	A4		
C129	A2	C402	*A2	IC110	*A2	R133	A1	R300	*B3		
C130	A2	C403	*B1	IC111	B1	R134	A2	R301	*B3		
C131	A2	C404	*A3	IC112	A2	R135	A2	R302	*B3		
C132	A1	C405	*B4	IC200	*B3	R136	A2	R303	*B3		
C133	A2	C406	*B4	IC201	*B4	R137	A2	R304	*B4		
C134	A2	C407	*B4	IC202	*B4	R138	A1	R305	*B4		
C135	A2	C408	*B4	IC203	*B3	R139	A2	R306	*B4		
C136	A2	C409	B4	IC204	*A4	R140	A2	R307	*B4		
C137	A1	C410	B4	IC205	*A3	R141	A2	R308	*B3		
C138	A1	C411	A1	IC206	*A4	R142	A1	R309	*B3		
C139	A1	C412	A1	IC207	A4	R143	A2	R310	*B4		
C140	A2	C413	B4	IC208	*A3	R144	A2	R311	*B4		
C141	A2	C414	B4	IC209	*A4	R145	A1	R312	*B3		
C142	A2	C415	*B4	IC300	*B3	R146	A2	R313	*B4		
C143	A2	C416	*B4	IC301	*B4	R147	A2	R314	*B4		
C144	A2	C417	*A2	IC302	*B3	R148	A2	R315	*A3		
C145	A2	C418	*B2	IC303	*A4	R149	A2	R316	*A4		
C146	A2	C419	*A3	IC304	A3	R150	A1	R317	*B4		
C147	A2	C420	A1	IC305	A4	R151	A2	R318	*A3		
C148	A2	C421	A2	IC400	*A2	R152	A2	R319	*A4		
C149	A1	C422	B2	IC401	B1	R153	A2	R320	*B3		
C150	A2	C423	A3	IC402	*A3	R154	A1	R321	*A4		
C151	*B2	C424	*B1	IC403	B1	R155	A2	R322	*B4		
C152	*B2	C425	*B1	IC404	A1	R156	*B1	R323	*A3		
C200	*B3	C426	A1	IC405	B1	R157	*B2	R324	*A4		
C201	*B4	C427	B1	IC406	A1	R158	*B2	R325	*A3		
C202	*B4	C428	B1	IC407	B2	R159	*B2	R326	*A4		
C203	*B4	C429	B1	IC408	*B2	R160	*B2	R327	*A3		
C204	*B4	C430	*B2			R161	*B2	R328	*A4		
C205	*B4	C431	*B2	L100	A1	R164	A1	R329	*A3		
C206	B3	C432	B1	L101	A2	R165	A1	R330	*A3		
C207	*B4	C433	A1	L102	A2	R166	A2	R331	*A3		
C208	B3	C434	*B2	L103	A2	R167	A2	R332	*A4		
C209	A4	C435	*B2			R168	A2	R333	*A4		
C210	A4	C436	B2	PS400	B4	R169	A2	R334	*A3		
C211	A4	C437	B2	PS401	B4	R170	B2	R335	*A3		
C212	A4	C438	B1	PS402	B4	R171	B2	R336	*A4		
C213	*B3			PS403	B4	R172	A2	R337	*A4		
C214	*B3	CL101	B2	PS404	B4	R173	A2	R338	*A3		
C215	*A4	CL102	A2			R174	*B4	R339	*A3		
C216	*A4	CL108	A1	Q107	A2	R175	*B4	R340	*A4		
C217	*A3	CL109	A2	Q200	A4	R176	B2	R341	*A4		
C218	A3	CL110	A2	Q300	*B4	R177	A2	R342	*A3		
C219	A3	CL111	A2	Q301	*B4	R178	A2	R343	*A4		
C220	A3			Q302	*A3	R179	A2	R344	*A3		
C221	A4	CN1	A1	Q303	*A4	R180	B4	R345	*A4		
C222	*A4	CN2	A2	Q304	*B4	R181	B4	R400	B1		
C223	*A4	CN3	A3	Q305	*B3	R200	*B3	R401	A1		
C224	*A4	CN4	A4	Q306	*A3	R201	B1	R402	A1		
C225	*A4	CN7	A4	Q307	*A3	R202	*B4	R403	*B4		
C226	*A3	CN200	B3	Q308	*A4	R203	*B4	R404	*B4		
C227	*A3	CN201	B4	Q309	*A3	R204	B3	R405	A1		
C228	*A3			Q310	*A4	R205	*A4	R406	A1		
C229	*A4	D300	*B4	Q400	*B4	R206	*A4	R407	A1		
C230	B3	D301	*B4	Q401	*B4	R207	*A4	R408	A1		
C231	B4	D302	*B4	Q402	*B1	R208	*A4	R409	*A1		
C232	*A4	D303	*A3	Q403	*B1	R209	*A4	R410	A1		
C233	A4	D304	*A3	Q404	*B1	R210	*A4	R411	*A1		
C234	A4	D305	*A4	Q405	*B1	R211	A3	R412	B1		
C235	*A3	D306	*A4			R212	A3	R413	*B1		
C236	*A4	D401	*A1	R100	*B1	R213	*A4	R414	*B1		
C237	*B3	D402	*A1	R101	*B1	R214	*A4	R415	*B1		
C238	*B4	D403	*A1	R102	*B1	R215	A3	R416	A1		



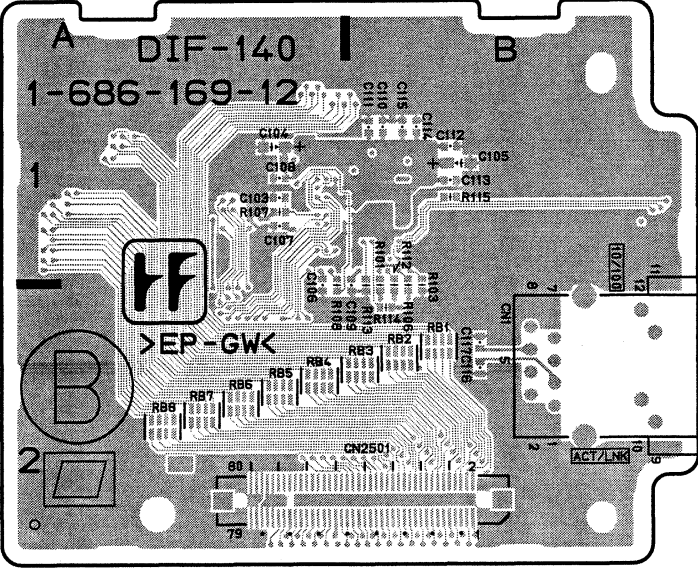
DIF-140 (1-686-169-12)

C1	A2	CN1	*B2	RB6	*A2
C2	A2	CN2501	*B2	RB7	*A2
C101	B1			RB8	*A2
C102	B1	IC101	B1	RB9	B2
C103	*A1			RB10	A2
C104	*A1	R1	A2	RB11	A2
C105	*B1	R101	*B2	RB12	A2
C106	*A2	R102	B2		
C107	*A1	R103	*B2	TP101	B2
C108	*A1	R104	B2		
C109	*B2	R105	B2	X101	B1
C110	*B1	R106	*B2		
C111	*B1	R107	*A1		
C112	*B1	R108	*A2		
C113	*B1	R109	B2		
C114	*B1	R110	B2		
C115	*B1	R111	B2		
C116	*B2	R112	*B2		
C117	*B2	R113	*B2		
		R114	*B2		
CL1	A2	R115	*B1		
CL2	A2	R116	B2		
CL3	A2	R117	B2		
CL4	A2	R118	B1		
CL5	A2				
CL6	A2	RB1	*B2		
CL7	A2	RB2	*B2		
CL8	A2	RB3	*B2		
CL9	A2	RB4	*A2		
CL10	A2	RB5	*A2		

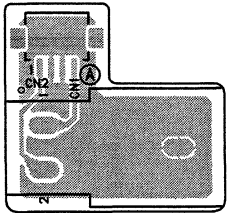
*:B SIDE



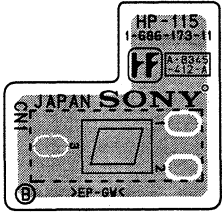
DIF-140 -A SIDE-
SUFFIX: -12



DIF-140 -B SIDE-
SUFFIX: -12



HP-115 -A SIDE-
SUFFIX: -11

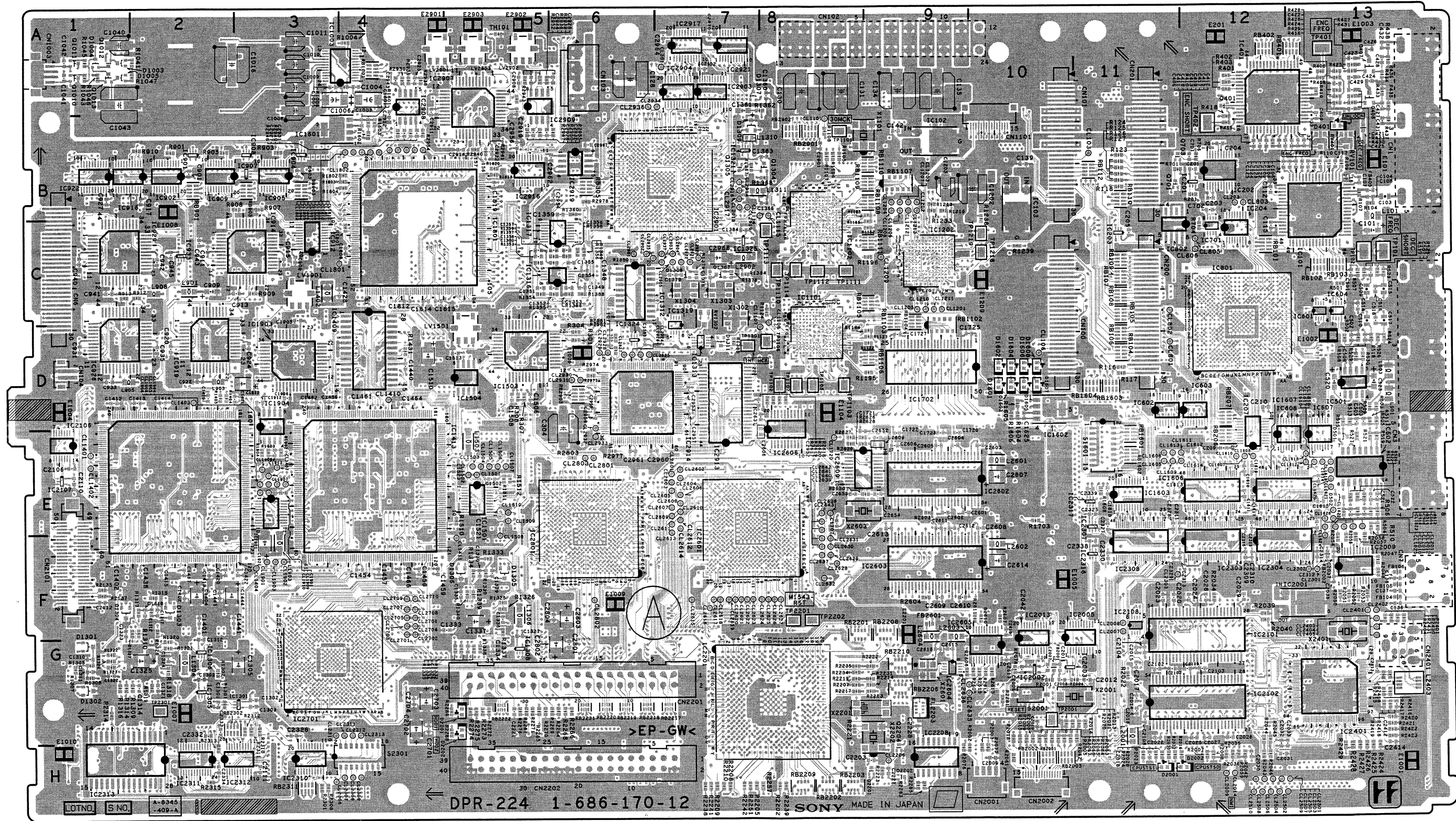


HP-115 -B SIDE-
SUFFIX: -11

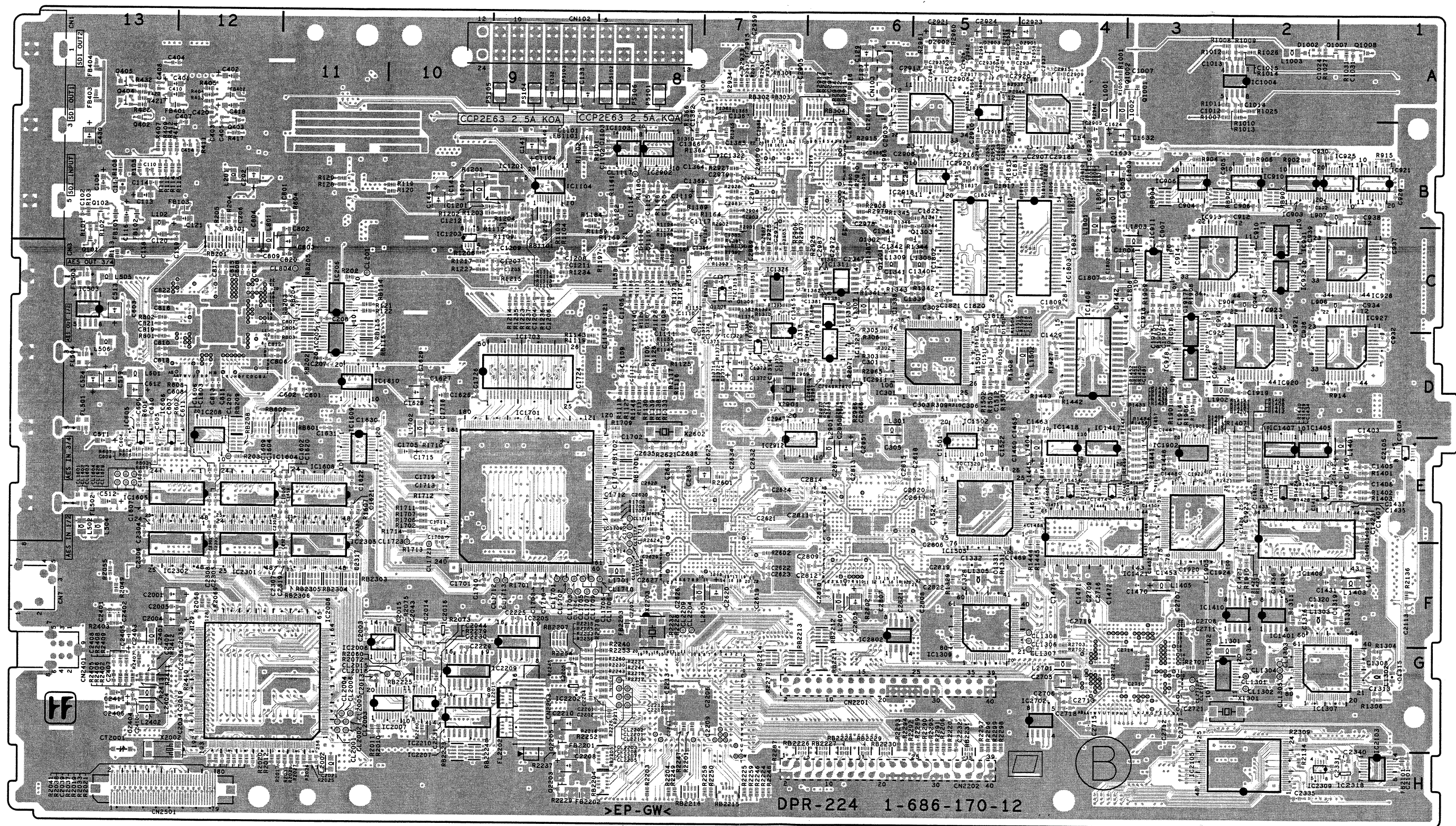
DPR-224 (1-686-170-12)

C101	C13	C501	C13	C936	*D2	C1331	*F5	C1436	*F2	C1631	*D11	C2022	G11	C2403	*F13	C2819	*F5	CL106	D10	CL1708	*F9	CL2605	E7	CN1101	B10	FL2202	*G9	IC1401	*F2	IC2609	E8	LV1501	D5	R402	A12
C102	*B13	C502	D13	C937	*C1	C1332	*F5	C1437	*F2	C1632	*B4	C2023	F11	C2404	*G13	C2820	*B5	CL201	*C11	CL1709	*F8	CL2606	E7	CN2001	H10	FL2203	G9	IC1402	E2	IC2701	G3	LV1901	C3	R403	A12
C103	B13	C503	D13	C938	*B1	C1333	F4	C1438	F2	C1633	*B4	C2024	F12	C2405	*F13	C2821	*F6	CL202	*E12	CL1710	*F8	CL2607	E7	CN2002	H10			IC1403	*E2	IC2702	*G4	LV2901	A4	R404	*A12
C104	B13	C504	E13	C939	*C2	C1334	G5	C1439	*F2	C1701	*F10	C2025	G12	C2406	*G13	C2822	*F5	CL203	B12	CL1712	*F9	CL2608	E7	CN2101	F1	IC101	B13	IC1404	*E2	IC2801	E6	LV2902	A5	R405	*A12
C105	*B13	C505	D13	C940	C1	C1335	F5	C1440	D4	C1702	*E8	C2026	F12	C2407	*G13	C2901	B8	CL301	A7	CL1713	*F9	CL2609	E7	CN2201	G6	IC102	B9	IC1405	*D2	IC2802	*G6	LV2903	A5	R406	A13
C106	B13	C506	E13	C941	C1	C1336	F5	C1441	F2	C1703	*F9	C2027	G12	C2408	*G13	C2902	A7	CL801	D11	CL1714	*F8	CL2610	E7	CN2202	H6	IC103	B10	IC1406	*D4	IC2901	B7		R407	*B13	
C107	B13	C507	C13	C942	C2	C1337	F5	C1442	*C4	C1704	*E8	C2028	G12	C2409	*G13	C2903	*B6	CL802	C11	CL1715	*F8	CL2611	E7	CN2203	*G9	IC201	B12	IC1407	*D2	IC2902	*B8	PS101	*A8	R408	A13
C108	B13	C508	D13	C943	C2	C1338	*C6	C1443	F2	C1705	*E10	C2029	F12	C2410	*G13	C2904	*A5	CL803	B12	CL1716	*F8	CL2612	E7	CN2401	*G13	IC202	B12	IC1408	*F2	IC2903	A7	PS102	*A8	R409	*B13
C109	B13	C509	C13	C944	*C2	C1339	*C5	C1444	F2	C1706	*F8	C2030	H12	C2411	*G13	C2905	*A7	CL804	*C11	CL1717	*E8	CL2613	E7	CN2501	*H13	IC203	C11	IC1409	C4	IC2904	A7	PS103	*A9	R410	B12
C110	*B13	C510	D13	C945	C2	C1340	*C5	C1445	*E4	C1707	E8	C2031	H12	C2412	G13	C2906	*B5	CL805	C12	CL1718	*E8	CL2614	E7			IC204	C12	IC1410	*F2	IC2905	*A4	PS104	*A9	R411	*B12
C111	*B13	C511	*E13	C1003	A4	C1341	*C6	C1446	*E3	C1708	*F10	C2032	H12	C2413	G13	C2907	*B4	CL806	C12	CL1719	*E8	CL2615	F7	CT2001	*H13	IC205	*D11	IC1411	*E3	IC2906	*A5	PS105	*A9	R412	*B13
C112	B12	C512	*E13	C1004	A4	C1342	*C6	C1447	*D3	C1709	*E8	C2033	H12	C2414	H13	C2908	A5	CL1101	B8	CL1720	E8	CL2616	F7			IC206	*C11	IC1412	*E4	IC2907	A5	PS106	*A8	R413	*A12
C113	*B13	C513	*C13	C1005	A3	C1343	*C6	C1448	*E3	C1710	*F10	C2034	*G12	C2601	E9	C2909	*A4	CL1107	D7	CL1721	*F10	CL2617	F7	D1	*C3	IC207	E12	IC1413	E4	IC2908	B4		R414	*B12	
C114	*B13	C514	C13	C1006	A3	C1344	*C5	C1449	*E3	C1711	*E10	C2035	*G12	C2602	E9	C2910	*A5	CL1108	C8	CL1723	*F10	CL2618	F7	D401	B13	IC208	*E12	IC1415	*E4	IC2909	B5	Q101	*C13	R415	B12
C115	C12	C515	C13	C1007	*A3	C1345	*C7	C1450	*F3	C1712	*E8	C2036	*G12	C2603	E10	C2911	A4	CL1114	B7	CL1801	C3	CL2619	F7	D501	E13	IC301	*D5	IC1417	*D4	IC2910	*B5	Q102	*B13	R416	B13
C116	*B13	C516	C13	C1008	A3	C1346	*C6	C1451	*E3	C1713	*E10	C2037	F13	C2604	E9	C2912	A4	CL1115	B8	CL1802	B4	CL2620	F7	D502	E13	IC401	A12	IC1418	*D4	IC2911	*D6	Q401	A12	R417	*B12
C117	B13	C517	D13	C1009	A3	C1347	*C6	C1452	*F3	C1714	*F8	C2038	F13	C2605	E9	C2913	*A5	CL1116	*D8	CL1803	B4	CL2621	F7	D1002	*A2	IC501	D13	IC1421	*F4	IC2912	*E7	Q402	*B13	R418	B12
C118	*C13	C518	D13	C1010	A3	C1348	C6	C1453	*F3	C1715	*E10	C2039	*H12	C2606	E9	C2914	B5	CL1117	*B8	CL1804	B4	CL2622	F7	D1003	A1	IC502	E13	IC1501	E5	IC2913	E7	Q403	*B12	R419	A13
C119	*C12	C519	*D13	C1011	A3	C1349	C6	C1454	*F4	C1716	*D10	C2042	F10	C2607	E10	C2915	*A4	CL1201	C9	CL1805	B4	CL2623	F7	D1004	A1	IC503	*C13	IC1502	*E5	IC2914	D6	Q404	*A13	R420	*A13
C120	*C13	C520	D13	C1012	*A3	C1350	C5	C1455	*B4	C1717	*D10	C2043	*F10	C2608	E10	C2916	*B5	CL1202	B9	CL1806	B4	CL2624	F7	D1005	A1	IC601	C13	IC1503	D5	IC2915	*A7	Q405	*A13	R421	*A13
C121	*B12	C521	E13	C1013	*A3	C1351	C5	C1456	D3	C1718	*F9	C2044	*G10	C2609	F9	C2917	*A5	CL1203	B9	CL1807	B4	CL2625	F8	D1301	G1	IC602	D11	IC1504	D5	IC2916	B5	Q406	A13	R422	*A13
C122	B13	C522	E13	C1014	*A2	C1352	C6	C1457	F4	C1719	*E10	C2101	*H1	C2610	F9	C2918	*B4	CL1204	B9	CL1808	B4	CL2626	F8	D1302	G1	IC603	D12	IC1505	*E5	IC2917	A7	Q407	A13	R423	A13
C123	B13	C523	D13	C1015	*A2	C1353	C6	C1458	F4	C1720	E9	C2102	G11	C2611	E9	C2919	A5	CL1205	C9	CL1809	B4	CL2627	F8	D1303	F2	IC604	C13	IC1601	B3	IC2918	*B6	Q701	B11	R424	A13
C124	B13	C524	*D13	C1016	A2	C1354	C6	C1459	*F4	C1721	E8	C2103	G12	C2612	E9	C2920	*A5	CL1206	B9	CL1810	B4	CL2628	F8	D1304	F1	IC605	*E13	IC1602	D10	IC2919	B6	Q703	B11	R425	A13
C125	B12	C601	*D11	C1024	A2	C1355	C6	C1460	*E4	C1722	E9	C2104	G11	C2613	E9	C2921	*A5	CL1207	B9	CL1811	B4	CL2629	F8	D1305	F5	IC606	*E13	IC1603	E11	IC2920	*B5	Q1001	*A3	R426	A13
C126	*A6	C602	*D11	C1031	*A1	C1356	C6	C1461	D4	C1723	E9	C2105	*E1	C2614	F10	C2922	B5	CL1208	B9	CL1812	B4	CL2630	F8	D1306	F5	IC607	E13	IC1604	*E12	IC2921	A7	Q1002	*A3	R427	A13
C127	*A6	C603	*C13	C1040	A1	C1357	C6	C1462	D3	C1724	*D9	C2106	E1	C2615	G9	C2923	*A4	CL1209	C9	CL1901	F3	CL2631	F8	D1307	A7	IC608	E12	IC1605	*E12	IC2922	A7	Q1007	*A2	R428	A13
C128	A6	C604	*E13	C1041	A1	C1358	C5	C1463	*D4	C1725	D9	C2107	G11	C2616	G9	C2924	*A5	CL1210	C9	CL1902	F3	CL2632	F8	D1308	*A7	IC701	C12	IC1606	E12	L101	C13	Q1008	*A1	R429	A13
C129	*A6	C605	*E13	C1042	A1	C1359	B6	C1464	D4	C1726	*D10	C2108	G11	C2617	G10	C2925	A4	CL1211	C9	CL1903	F3	CL2635	G9	D1309	B7	IC801	D12	IC1607	E12	L102	*C13	Q1010	A1	R430	A13
C130	A8	C606	*D13	C1043	A1	C1360	A8	C1465	*D4	C1727	D9	C2109	G12	C2618	F10	C2926	A6	CL1212	B9	CL1904	E3	CL2636	G9	D1310	*B7	IC802	B12	IC1608	*E11	L201	*B12	Q1011	A1	R431	A13
C131	A8	C607	*D13	C1101	*B9	C1361	A7	C1466	*F4	C1801	*C4	C2110	E1	C2619	*F7	C2927	B4	CL1213	B9	CL1905	E3	CL2637	F8	D1311	D7	IC901	B2	IC1609	*E11	L301	*D6	Q1012	A1	R432	*A13
C132	*A9	C608	*E12	C1102	*B8	C1362	*A8	C1467	*E4	C1802	*C4	C2111	H3	C2620	*F7	C2928	B5	CL1301	*G2	CL1906	E3	CL2638	E8	D1501	*C5	IC902	B2	IC1610	*D11	L501	D13	Q1013	A1	R433	A13
C133	*A9	C609	*E13	C1103	*B8	C1363	B8	C1468	*E4	C1803	*B4	C2112	F1	C2621	*E7	C2929	*A5	CL1302	*G2	CL1907	E3	CL2639	F8	D1601	D10	IC903	*B2	IC1701	*E9	L502	*E13	Q1301	*C6	R434	A13
C134	A9	C610	*D13	C1104	*B9	C1364	*B8	C1469	*F4	C1804	*C3	C2113	*F1	C2622	*F7	C2930	*B5	CL1303	*G2	CL1908	E3	CL2640	F8	D1602	D10	IC904	B3	IC1702	D10	L503	D13	Q1302	*C6	R435	A13
C135	A9	C611	*D12	C1105	*C8	C1365	*B7	C1470	*F3	C1805	*B4	C2201	*G8	C2623	*F7	C2931	B4	CL1304	*G2	CL1909	E3	CL2641	B8	D1603	D10	IC905	B3	IC1703	*D10	L504	*E13	Q1303	*C5	R436	A13
C136	F13	C612	*D13	C1106	*D8	C1366	*B7	C1471	*F4	C1806	*C3	C2202	*G8	C2624	*E7	C2932	B5	CL1305	*G2	CL1910	E3	CL2642	E8	D1604	D10	IC906	*B3	IC1801	C4	L505	*C13	Q1304	B8	R437	B13
C137	F13	C701	B12	C1107	*C8	C1367	*A7	C1472	*F4	C1807	*C4	C2203	H9	C2625	*E7	C2933	*B5	CL1306	*F4	CL2001	*G11	CL2643	E8	D1605	D10	IC907	B3	IC1802	*B5	L506	*D13	Q1305	B7	R438	A13
C138	F13	C702	B12	C1108	*C8	C1368	B8	C1473	*E3	C1808	C4	C2204	*G9	C2626	*F8	C2934	*A4	CL1307	*G4	CL2002	*G11	CL2701	F4	D1606	D10	IC908	B3	IC1803	*B5	L601	*D13	Q1306	*C7	R501	C13
C139	B10	C801	*B11	C1109	*D8	C1369	*B7	C1474	*E4	C1809	*C4	C2205	*G9	C2627	*F8	C2935	*A5	CL1308	*F4	CL2003	*G11	CL2702	F4	D1607	D10	IC909	B2	IC1901	E3	L801	*C12	Q1307	C7	R502	D13
C140	*B9	C802	*C11	C1110	*C8	C1370	*D7	C1475	*E4	C1810	*B4	C2206	*G7	C2628	*E8	C2936	*A5	CL1401	E1	CL2004	*G11	CL2703	F4	D1608	D10	IC910	*B2	IC1902	*E3	L901	C2	Q1308	C7	R503	D13
C141	*B9	C803	*C11	C1111	*D8	C1371	*D7	C1476	*F4	C1811	*B4	C2207	*F8	C2629	*F8	C2937	*A4	CL1402	E1	CL2005	*G11	CL2704	F4	D2001	H11	IC911	*C3	IC1903	D3	L903	D2	Q1309	*C7	R504	E13
C142	B9	C804	*C12	C1112	*D8	C1372	*D7	C1479	*F4	C1812	C4	C2208	*H9	C2630	*E8	C2938	*A5	CL1403	D2	CL2006	*G11	CL2705	F4	D2002	H11	IC912	*C3	IC1904	E3	L904	*C2	Q2201	H9	R505	D13
C143	*B10	C805	*D12	C1113	*D8	C1373	*D7	C1481	*E4	C1813	*B4	C2																							

R912	C2	R1188	*C8	R1369	*D7	R1508	*D5	R2034	F12	R2246	*H7	R2604	F9	R2974	D6	RB2223	*H10
R913	C1	R1189	*B8	R1370	*C7	R1509	*D5	R2035	H12	R2247	*G8	R2605	G10	R2975	D6	RB2224	*H10
R914	*D1	R1194	*C8	R1371	*D7	R1510	E5	R2036	H12	R2248	*H7	R2606	G9	R2976	*D6	RB2225	*G10
R915	*B1	R1195	D9	R1372	*D7	R1511	E5	R2037	*H12	R2249	*H8	R2607	F10	R2977	E6	RB2226	*H6
R916	*A6	R1196	C9	R1373	*D7	R1512	E5	R2038	*H12	R2250	*H7	R2610	F10	R2978	B6	RB2227	*H6
R1001	*A4	R1197	*C9	R1374	*C7	R1601	B4	R2039	F12	R2251	H7	R2611	F10	R2979	*B6	RB2228	*H6
R1004	A4	R1201	*B10	R1375	*C7	R1602	B4	R2040	F12	R2252	*G8	R2613	G10	R2980	*B6	RB2229	*H6
R1005	*A4	R1202	*B10	R1376	*C7	R1603	B4	R2041	*H12	R2253	*G8	R2614	G10	R2981	D6	RB2230	*H6
R1006	A4	R1203	*B10	R1377	*C7	R1604	D10	R2042	H12	R2254	*G9	R2615	G10	R2982	D6	RB2231	*H5
R1007	*A3	R1204	*B9	R1378	C7	R1605	D10	R2043	H12	R2255	*G9	R2617	D8			RB2302	G2
R1008	*A3	R1206	*C10	R1379	C7	R1606	D10	R2044	G12	R2256	*G9	R2618	D8	RB101	C12	RB2303	*F11
R1009	*A2	R1213	B9	R1380	*C6	R1607	*E11	R2045	G12	R2257	H7	R2619	D8	RB102	C13	RB2304	*F11
R1010	*A2	R1214	*C9	R1381	*C6	R1608	E11	R2046	H12	R2258	*H7	R2620	D8	RB103	C13	RB2305	*F11
R1011	*A3	R1215	*C9	R1382	*C6	R1701	*F9	R2047	F13	R2259	*H7	R2621	*E8	RB104	D11	RB2306	*F11
R1012	*A3	R1216	B9	R1383	*C7	R1702	*E10	R2048	F13	R2260	*G8	R2624	*E8	RB105	C11	RB2311	H3
R1013	*A2	R1217	*C10	R1384	C7	R1703	E10	R2049	*F13	R2264	G6	R2625	*E8	RB106	D11	RB2901	B8
R1014	*A2	R1223	*C9	R1385	D7	R1704	*E8	R2050	F13	R2265	G5	R2626	E8	RB107	C11	RB2902	B8
R1025	*A2	R1227	*C10	R1386	C6	R1705	*E8	R2051	F13	R2266	G6	R2627	E8	RB108	C11	RB2903	D6
R1026	*A2	R1233	B9	R1387	*C6	R1706	*E10	R2052	F13	R2267	G5	R2628	E8	RB109	C11		
R1027	*A2	R1234	*C9	R1388	C6	R1707	*E10	R2053	F13	R2268	G6	R2629	E8	RB110	B11	RV101	B13
R1031	*A1	R1235	*C9	R1389	*C7	R1708	*E8	R2054	F13	R2269	G5	R2630	E8	RB112	B11	RV401	B13
R1041	A2	R1236	*C9	R1390	*C7	R1709	*D8	R2055	*F13	R2270	G5	R2701	*G3	RB114	*C11	RV1302	C7
R1043	A1	R1237	*C9	R1391	*C7	R1710	*E10	R2056	F13	R2271	G5	R2702	*G4	RB115	*D11		
R1045	A1	R1238	C10	R1392	*C7	R1711	*E10	R2057	F13	R2272	G5	R2703	*F4	RB116	*D11	S1601	E11
R1046	A1	R1239	C10	R1393	*C7	R1712	*E10	R2058	F13	R2273	G5	R2802	*F6	RB201	*C12	S2001	G10
R1047	A2	R1301	G2	R1394	*C7	R1713	*F10	R2059	H12	R2274	G5	R2803	E6	RB202	*D11	S2301	H4
R1101	*B9	R1302	G2	R1395	*C7	R1714	*E10	R2060	*G10	R2275	G5	R2901	*C7	RB203	*C11		
R1102	*B9	R1304	*G1	R1401	*E1	R1801	C4	R2061	H10	R2276	G5	R2902	*B7	RB204	*C11	TH101	A5
R1103	*B9	R1305	G1	R1402	*E1	R1802	B4	R2062	G10	R2277	*G7	R2903	*B7	RB205	*C11		
R1104	*B9	R1306	*G1	R1403	*E1	R1803	B4	R2063	G10	R2278	*G9	R2904	*B7	RB206	E12	TP101	C13
R1105	B8	R1307	G1	R1404	D2	R1804	B4	R2064	G10	R2279	*G10	R2905	*C7	RB207	D12	TP102	C13
R1106	B8	R1308	G1	R1405	D2	R1805	*B4	R2065	G10	R2280	*G10	R2906	*C7	RB208	*E12	TP401	A13
R1107	B8	R1309	G1	R1406	*D2	R1806	*B4	R2066	G10	R2281	G10	R2907	*C7	RB209	*D12	TP402	B12
R1108	B8	R1310	F2	R1407	*D2	R1807	*B4	R2067	G10	R2283	H9	R2908	*B6	RB301	*A7	TP1101	B8
R1109	*C9	R1311	*F2	R1408	*E2	R1808	*B4	R2068	*F12	R2285	H9	R2909	*B6	RB302	*A7	TP1102	D8
R1110	*C9	R1312	F2	R1409	*E2	R1809	*B4	R2069	*F12	R2286	G5	R2910	*B6	RB303	*A7	TP1103	D8
R1111	*B9	R1313	*F1	R1410	*E2	R1810	*B4	R2070	G10	R2287	*H7	R2911	*B6	RB304	*A6	TP1105	D8
R1112	*C9	R1314	G1	R1411	*E2	R1811	*B4	R2071	G10	R2288	G5	R2912	*B6	RB305	B6	TP1106	D8
R1113	*C9	R1315	F2	R1412	*E2	R1812	*B4	R2072	*G10	R2289	*G5	R2914	*B6	RB401	A13	TP1107	D8
R1114	*B9	R1316	G1	R1413	*E2	R1813	*B4	R2073	*G10	R2290	*G5	R2915	*B6	RB402	A12	TP1110	C8
R1116	*D8	R1317	F2	R1414	*E2	R1814	*B4	R2074	G10	R2291	*G5	R2916	*B7	RB601	*D11	TP1111	C8
R1117	*D8	R1318	G2	R1415	*E2	R1815	*B5	R2075	*G10	R2292	*G5	R2917	*B7	RB602	*D12	TP1112	C8
R1118	*D8	R1319	G2	R1416	*E2	R1816	*B5	R2076	H9	R2293	*G6	R2918	*B7	RB701	*C12	TP1113	C8
R1119	*D9	R1320	G2	R1417	*E2	R1817	*B5	R2077	H10	R2294	*G6	R2925	*C7	RB901	B2	TP1114	C8
R1121	*C8	R1321	G2	R1418	*E2	R1818	B5	R2134	*H2	R2295	*G5	R2926	*C6	RB902	*B2	TP1218	C10
R1122	D9	R1322	G1	R1419	*E2	R1819	*B5	R2135	F1	R2296	*G5	R2927	*B7	RB903	B3	TP1219	C10
R1123	D9	R1323	G1	R1420	*E2	R1820	B5	R2136	*F1	R2297	*G5	R2928	*B7	RB904	*B3	TP1301	D7
R1124	C8	R1324	G1	R1421	*E2	R1901	*D3	R2137	F1	R2298	*G5	R2929	*A7	RB905	B3	TP2001	G10
R1125	*D8	R1325	F5	R1422	*F2	R1902	E3	R2201	*G8	R2299	*G5	R2930	*A7	RB906	*B3	TP2201	F8
R1126	*D8	R1326	F5	R1423	*F2	R1903	E3	R2202	H8	R2301	H3	R2931	*A7	RB1001	A4	TP2202	F8
R1127	*D8	R1327	F1	R1424	*E2	R1904	E3	R2203	*H8	R2308	H3	R2932	*A7	RB1101	*B9	TP2301	G2
R1128	*C8	R1328	F2	R1425	*E2	R1905	*D3	R2204	*H8	R2309	*G2	R2933	*A7	RB1102	D9		
R1129	*C8	R1329	*F5	R1426	*E2	R1906	*D3	R2205	H7	R2310	G3	R2934	*A7	RB1103	C9	X1101	B8
R1130	*D8	R1330	F5	R1427	*D4	R1907	*C3	R2206	*G5	R2311	G3	R2935	A4	RB1104	C9	X1301	*G2
R1131	*D8	R1331	*F5	R1428	*E2	R1908	*C3	R2207	G8	R2312	G3	R2936	A5	RB1105	C9	X1302	C7
R1133	*D8	R1332	G5	R1429	*E2	R1909	*C3	R2208	H7	R2313	H2	R2937	*A5	RB1106	D9	X1303	C7
R1134	*D8	R1333	F5	R1430	*E2	R1910	*F2	R2209	H7	R2314	G1	R2938	A4	RB1107	B9	X1304	C7
R1138	*D8	R1334	F5	R1431	D4	R1911	*E3	R2210	H7	R2315	H2	R2939	A5	RB1108	B9	X2001	G10
R1139	*D8	R1335	G5	R1433	*D3	R1912	*E3	R2211	*G8	R2401	F13	R2940	B5	RB1109	B9	X2002	*H13
R1140	*C8	R1336	G5	R1434	*E3	R2001	G10	R2212	*G8	R2402	*G13	R2941	B5	RB1110	B9	X2201	G9
R1143	*D9	R1337	F5	R1435	*E3	R2002	H9	R2213	G9	R2403	*F13	R2942	*A4	RB1111	C9	X2202	G9
R1144	D9	R1338	G5	R1436	*E3	R2003	H10	R2214	G9	R2404	F13	R2943	A5	RB1601	E11	X2203	*F8
R1146	*D8	R1339	F5	R1437	*E3	R2004	G10	R2215	*G9	R2405	*G13	R2944	*A5	RB1602	E11	X2401	F13
R1147	*D8	R1340	F5	R1438	*E3	R2005	G10	R2216	*G8	R2406	*G13	R2945	*A5	RB1603	D11	X2601	G9
R1148	*D8	R1341	*C6	R1439	*E3	R2006	G10	R2217	G8	R2407	*G13	R2946	B4	RB1604	D11	X2602	*D8
R1152	*C8	R1342	*C5	R1440	*E3	R2007	H12	R2218	*G8	R2408	*G13	R2947	B5	RB1701	*E8	X2603	E8
R1153	*D8	R1343	*C6	R1441	*E3	R2008	H12	R2219	G8	R2409	*G13	R2948	*B5	RB1702	*E8	X2901	*D7
R1156	*C8	R1344	*C5	R1442	*D4	R2009	G10	R2220	*G5	R2410	*G12	R2949	B4	RB2001	H10		
R1157	*C8	R1345	*B6	R1443	*D4	R2010	*G11	R2221	G8	R2411	*G13	R2950	B5	RB2002	H10		
R1158	*C8	R1346	*C6	R1444	*F4	R2011	*G11	R2222	G9	R2412	*G13	R2951	A4	RB2003	H10		
R1159	*C9	R1347	*B5	R1445	*F4	R2012	*H12	R2223	H9	R2413	*G13	R2952	A5	RB2201	F8		
R1161	*B8	R1348	*C6	R1446	*E4	R2013	G11	R2224	*H7	R2414	G13	R2953	*B5	RB2202	H8		
R1162	C9	R1349	C6	R1447	*E3	R2014	G11	R2225	*H7	R2415	G13	R2954	B4	RB2203	H8		
R1163	C9	R1350	C6	R1448	*E4	R2015	G10	R2226	*G9	R2416	G13	R2955	B6	RB2204	*H8		
R1164	*B8	R1351	*C7	R1449	*E3	R2016	H11	R2227	*G8	R2417	G13	R2956	*A5	RB2205	*H8		
R1165	*C8	R1352	*C7	R1450	*E4	R2017	*H11	R2228	*G8	R2418	G13	R2957	*B5	RB2206	G9		
R1166	*C8	R1353	C5	R1451	*E4	R2018	G10	R2229	*H9	R2419	G13	R2958	*A4	RB2207	*F9		
R1167	*C8	R1354	C5	R1452	*E4	R2019	*H12	R2230	*G8	R2420	G13	R2959	*A5	RB2208	F9		
R1168	*B8	R1355	C6	R1454	*E4	R2020	*H12	R2231	G9	R2421	G13	R2960	*A5	RB2209	H8		
R1169	*C8	R1356	C6	R1455	*E4	R2021	*H12	R2232	*G8	R2422	G13	R2961	*A5	RB2210	G9		
R1170	*C8	R1357	C6	R1456	*E4	R2022	G11	R2233	*G9	R2423	G13	R2962	*A5	RB2211	*G6		
R1171	*C8	R1358	C6	R1457	*D3	R2023	H11	R2234	G8	R2424	H13	R2963	*A5	RB2212	*F6		
R1173	*C8	R1359	C6	R1458	*D3	R2024	H11	R2235	G8	R2425	H13	R2964	*D6	RB2213	*G7		
R1174	*C8	R1360	B6	R1459	*E2	R2025	*H11	R2237	*H9	R2426	H13	R2965	*D6	RB2214	*G7		
R1176	*C8	R1361	*A7	R1460	*E2	R2026	*H11	R2238	H7	R2427	H13	R2966	*D6	RB2215	*H7		
R1178	*C																



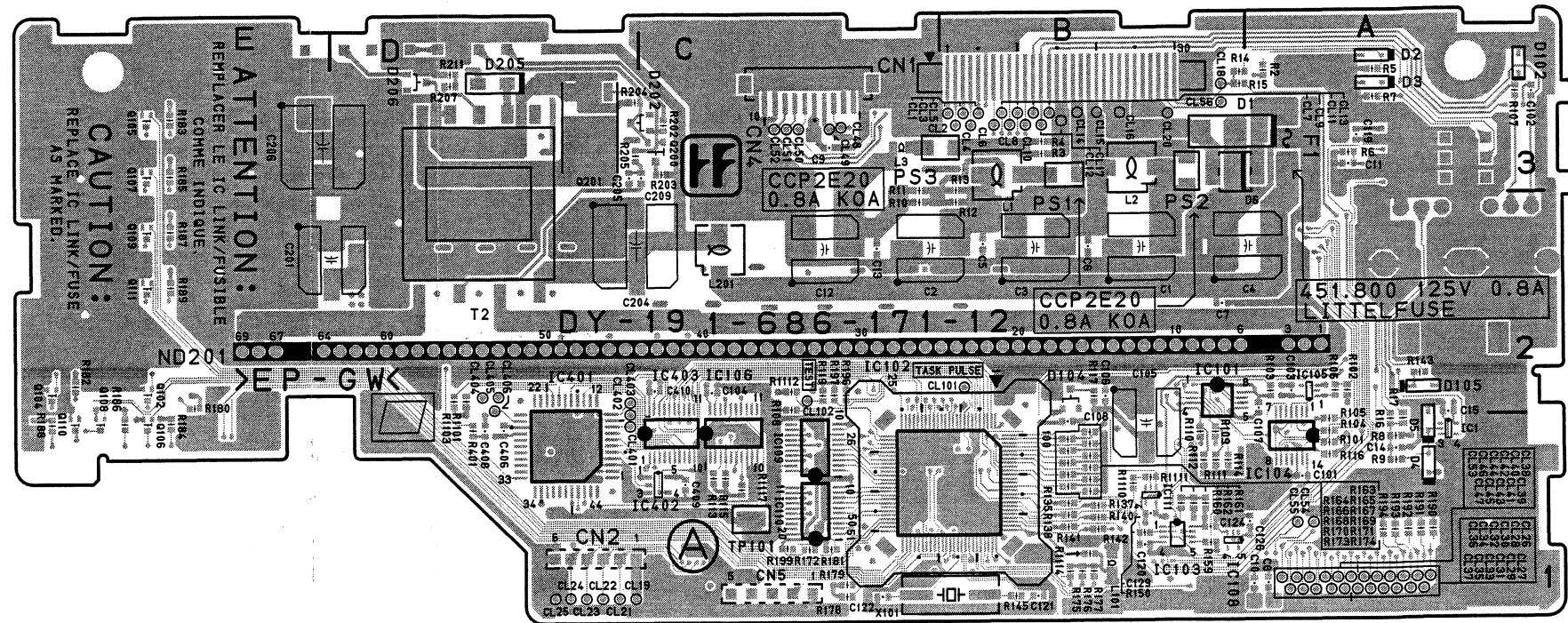
DPR-224 -A SIDE-
SUFFIX: -12



DPR-224 -B SIDE-
SUFFIX: -12

DY-19 (1-686-171-12)

C1	B2	CL16	B1	IC104	A2	R123	*A1	R305	*C2
C2	C2	CL17	B1	IC105	A2	R124	*A1	R306	*D2
C3	B2	CL18	B1	IC106	C3	R125	*A1	R307	*D2
C4	A2	CL19	D3	IC107	*B1	R126	*A1	R308	*D2
C5	B2	CL20	B1	IC108	B3	R127	*A1	R309	*D2
C6	B2	CL21	D3	IC109	C3	R128	*A1	R310	*B2
C7	B2	CL22	D3	IC110	C3	R129	*A1	R311	*C2
C8	A3	CL23	D3	IC111	B3	R130	*A1	R312	*C2
C9	C1	CL24	D3	IC112	*C1	R131	*A1	R313	*C2
C10	A3	CL25	D3	IC200	*C3	R132	*A1	R314	*C2
C11	A1	CL26	A3	IC401	D3	R133	*A1	R315	*C2
C12	C2	CL27	A3	IC402	C3	R134	*A1	R316	*D2
C13	C2	CL28	A3	IC403	C3	R135	B3	R317	*D2
C14	A3	CL29	A3			R136	*A1	R318	*D2
C15	A2	CL30	A3	L1	B1	R137	B3	R319	*D2
C101	A3	CL31	A3	L2	B1	R138	B3	R401	D3
C102	A1	CL32	A3	L3	C1	R139	*A1	R402	*D1
C103	A2	CL33	A3	L101	B3	R140	B3	R1101	D2
C104	C2	CL34	A3	L200	*D2	R141	B3	R1102	*C1
C105	B3	CL35	A3	L201	C2	R142	B3	R1103	D2
C106	B2	CL36	A3			R143	A2	R1104	*C1
C107	A2	CL37	A3	ND201	*C2	R144	*B1	R1105	*C1
C108	B3	CL38	A3			R145	B3	R1106	*C1
C109	*B1	CL39	A3	PS1	B1	R146	*B1	R1107	*C1
C110	*C1	CL40	A3	PS2	B1	R147	*B3	R1108	*C1
C111	*B1	CL41	A3	PS3	B1	R148	*B1	R1109	*C1
C112	*B1	CL42	A3			R149	*B3	R1110	B3
C113	*B1	CL43	A3	Q101	*C1	R150	B3	R1111	B3
C114	*B1	CL44	A3	Q102	E2	R151	*B1	R1112	C2
C115	*B1	CL45	A3	Q104	E2	R152	*B3	R1113	*B1
C116	*B1	CL46	A3	Q105	E1	R153	*B3	R1114	B3
C117	*B1	CL47	A3	Q106	E3	R154	*B1	R1115	*B1
C118	*B1	CL48	C1	Q107	E1	R155	*C1	R1116	*C1
C119	A1	CL49	C1	Q108	E3	R156	*B1	R1117	C3
C120	B3	CL50	C1	Q109	E2	R157	*C1		
C121	B3	CL51	C1	Q110	E3	R158	*B1	RB401	*C1
C122	C3	CL52	C1	Q111	E2	R159	B3	RB402	*C1
C123	*C1	CL53	A3	Q200	C1	R160	B3		
C124	B3	CL54	A3	Q201	D1	R161	B3	RV101	*A2
C125	*C1	CL55	A3	Q300	*B2	R162	B3	RV102	*A2
C126	A3	CL56	B1	Q301	*C2	R163	B3		
C127	*C1	CL101	B2	Q302	*C2	R164	B3	S1	*A3
C128	*C1	CL102	C2	Q303	*C2	R165	B3		
C129	B3	CL401	D3	Q304	*C2	R166	B3	T2	D2
C130	*C1	CL402	D2	Q305	*C2	R167	B3		
C131	*C1	CL403	D2	Q306	*D2	R168	B3	TP101	C3
C132	*C1	CL404	D2	Q307	*D2	R169	B3		
C200	*C3	CL405	D2	Q308	*D2	R170	B3	X101	B3
C201	D2	CL406	D2	Q309	*D2	R171	B3		
C202	*C3			Q310	*D2	R172	C3	*:B SIDE	
C203	*C3	CN1	B1	Q311	*D2	R173	B3		
C204	D2	CN2	*D1	Q312	*D2	R174	B3		
C205	D1	CN3	*A1	Q313	*D2	R175	B3		
C206	E1	CN4	C1			R176	B3		
C208	*C3	CN5	*C1			R177	B3		
C209	C1			R2	A1	R178	B3		
C300	*B2	D1	B1	R4	B1	R179	C3		
C301	*C2	D2	A1	R5	A1	R180	E2		
C302	*C2	D3	A1	R6	A1	R181	C3		
C303	*C2	D4	A3	R7	A1	R182	E2		
C304	*C2	D5	A3	R8	A3	R183	E1		
C305	*C2	D6	B1	R9	A3	R184	E3		
C306	*D2	D102	A1	R10	C2	R185	E1		
C307	*D2	D104	B2	R11	C1	R186	E3		
C308	*D2	D105	A2	R12	B2	R187	E2		
C309	*D2	D106	*B1	R13	B1	R188	E3		
C401	*D1	D107	*B3	R14	B1	R189	E2		
C402	*D1	D108	*B3	R15	B1	R190	A3		
C403	*D1	D109	*B3	R16	A3	R191	A3		
C404	*D1	D110	*E2	R17	A3	R192	A3		
C405	*D1	D112	*E2	R101	A3	R193	A3		
C406	D3	D113	*E3	R102	A2	R194	A3		
C407	*D1	D114	*E1	R103	A2	R195	*A1		
C408	D3	D115	*E3	R104	A3	R196	C2		
C409	C3	D116	*E1	R105	A3	R197	C2		
C410	C2	D117	*E2	R106	A2	R198	*C1		
		D118	*E1	R107	A1	R199	C3		
		D119	*E2	R108	C2	R201	*C3		
CL1	B1	D200	*D3	R109	B3	R202	C1		
CL2	B1	D201	*D3	R110	B3	R203	C1		
CL3	B1	D202	C1	R111	B3	R204	D1		
CL4	B1	D203	*D3	R112	B3	R205	D1		
CL5	B1	D205	D1	R113	C3	R207	D1		
CL6	B1	D206	D1	R114	B3	R208	*C3		
CL7	B1	D207	*E3	R115	C3	R209	*C3		
CL8	B1			R116	A3	R211	D1		
CL9	B1			R117	B2	R212	*C3		
CL10	B1	F1	A1	R118	*B1	R300	*B2		
CL11	B1			R119	C2	R301	*C2		
CL12	B1	IC1	A3	R120	*A1	R302	*C2		
CL13	B1	IC101	B2	R121	*A1	R303	*C2		
CL14	B1	IC102	B3	R122	*A1	R304	*C2		
CL15	B1	IC103	B3						



KY-536 (1-686-172-11)

C1	*A1	Q201	C2	S116	C1
C2	*A1	Q202	C1	S117	A1
C3	*B1	Q203	A1	S118	C1
C4	*B1	Q204	C2	S119	C1
CL101	B1	Q205	C1	S120	D1
C201	*C2	Q206	C2	S121	C2
C202	C1	Q207	C1	S122	C2
		Q208	C2	S123	D2
CL1	*A1	Q209	C1	S124	C2
CL2	*A1	Q210	C2	S125	D2
CL3	*A1	Q211	C1	S126	C2
CL4	*A1	Q212	C2	S127	C2
CL5	*A1	Q213	C1		
CL6	*A1	Q214	C2		
CL7	*A1	Q215	C1		
CL8	*A1	Q216	C2		
CL9	*A1	Q217	C1		
CL10	*A1				
CL11	*A1	R101	*A1		
CL12	*A1	R102	*A1		
CL13	*A1	R103	*A1		
CL14	*A1	R104	*A1		
CL15	*A1	R105	*A1		
CL16	*A1	R106	*A2		
CL17	*A1	R107	*A2		
CL18	*A1	R108	*A2		
CL19	*A1	R109	*A2		
CL20	*A1	R110	*A2		
CL21	*A1	R111	*B1		
CL22	*A1	R112	*B1		
CL23	*A1	R201	*C2		
CL24	*B1	R202	*C2		
CL25	*A1	R203	*C2		
CL26	*A1	R204	*C2		
CL27	*A1	R205	*C2		
CL28	*A1	R206	*C2		
		R207	*C2		
CN3	A1	R208	*C2		
		R209	*C2		
D101	*A2	R210	*C1		
D102	*B2	R211	*A1		
D103	*C1	R212	*B1		
D104	*A1	R213	*B1		
D105	*A1	R214	*B1		
D106	D1	R215	*A2		
D107	*C2	R216	*A1		
D108	*B2	R217	*C1		
D109	*B2	R218	*A1		
D110	B1	R219	*A2		
D111	C1	R220	*C1		
D112	C1	R221	*B2		
D113	*C2	R222	*D1		
D114	*C2	R223	*B2		
D115	*B2	R224	*D1		
D116	*A1	R225	*C2		
D117	*A1	R226	*D1		
D118	*A1	R227	*B2		
D119	*A1	R228	*C2		
D120	*A1	R229	*B2		
D201	*A1	R230	*C2		
D202	*B1	R231	*C2		
D203	*B1	R232	*D2		
D204	*C1	R233	*C2		
D205	*A2	R234	*C1		
D206	A1				
D207	D1	RV201	A1		
D208	D1	RV202	B1		
D209	C2	RV203	B1		
D210	C2	RV204	B1		
D211	D2	RV205	A2		
D212	*C2				
D213	*C2	S101	A2		
D214	*C1	S102	A2		
D215	*C1	S103	B2		
		S104	B2		
IC101	B1	S105	C2		
IC201	C2	S106	B2		
IC202	C1	S107	B2		
		S108	C2		
Q101	B1	S109	C1		
Q102	B1	S110	C1		
Q103	B1	S111	D1		
Q104	B1	S112	B1		
Q105	B1	S113	B1		
Q106	B1	S114	A1		
Q107	B1	S115	B1		

*:B SIDE

